

The Physico-chemical Constants of Binary Systems in Concentrated Solutions

VOLUME 2

TWO ORGANIC COMPOUNDS

(at least One a Hydroxyl Derivative)

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Preface to Volume 2

With this second volume of my book, we have collected all the numerical data published about the concentrated binary solutions of organic compounds.

In many cases, the reader will be shocked by the low degree of precision of the measurements since, when different authors made research on the same subject, the quantitative discrepancies are obvious.

This may be due, at least to two kinds of difficulties: different methods on the physical side, and the impurity of the used samples. The possibility of this second cause of error is not considered with sufficient care by most of the authors.

In the case of organic compounds, this is historically easy to understand. Before the twentieth century, organic compounds were generally considered to be too unstable to warrant great care in their purification: only Mendeleev, in his classical studies on ethyl alcohol (1869), and later de Visser (1891) with acetic acid, took the necessary care and found exact values of the measured constants; S. Young, from 1884 on, in his well-known researches on the equation of state, prepared some thirty organic compounds

in a very pure state, which has given a lasting value to his quantitative measurements and has proved the possibility to attain such a goal with certainty.

Therefore, it is a pity that so much work has been done with too little care in that direction; this diminishes the value of numerous numerical data, whatever the care given to the physical methods used.

Presently such errors are no longer admissible because, in many cases, it is easy to obtain the necessary pure samples from different sources, as for example from the Chemical Division of the National Bureau of Standards, in Washington, or from the National Chemical Laboratory in Teddington (England); it is also easy to find out what is known about the methods of purification and the numerical values of physical constants in my own book, Physico-chemical Constants of Pure Organic Compounds, published by Elsevier (Amsterdam - New York) in 1950, to which a Supplement of Addenda and Corrigena will soon be published.

June, 1959

Jean Timmermans

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METHANE + ETHYL ALCOHOL

1

H. HYDROCARBONS + HYDROXYL DERIVATIVES

XXI. HYDROCARBONS + ALCOHOLS

Methane (CH_4) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Frolich, Tauch and al., 1931

P	a
0	0
20	8
40	16
60	25
80	33
100	41
120	50

$$a = \frac{\text{vol. of gaz}}{\text{vol. of liq.}} \text{ at } 25^\circ \text{ and } 1 \text{ atm.}$$

Methane (CH_4) + Isopropyl alcohol ($\text{C}_3\text{H}_8\text{O}$)

Frolich, Tauch and al., 1931

P	a
0	0
20	9
40	20
60	32
80	43
97	52

Ethane (C_2H_6) + Methyl alcohol (CH_4O)

Kuenen, 1897 and 1902 - 1903

t	P	t	P
Critical points			
241.2	80.0	51.9	121.5
241.1	80.45	45.8	118.5
240.0	81.5	41.7	116.5
219.0	100.0	36.0	114.5
216.1	101.5	33.8	114.7
160.8	136.5	26.4	113.0
156.5	138.0	18.6	114.7
154.2	138.7	13.2	118.0
151.5	139.7	12.4	118.5
131.9	143.5	-0.6	144
128.5	144.0	-1.5	150
126.0	144.5	-2.5	155 (?)
78.4	135.0	-2.6	152
74.6	133.0	-3.6	156.5
70.8	131.5	-4.4	161.5
66.4	129.5	-5.3	168
62.3	127.0	-6.3	175
57.0	124.5		

C.V.T.

0%	sat. sol.	
32.16	48.9	35.37 52.0
Kuenen and Robson, 1899		
t	P ₂	Rem.
14.95	33.62	V + L
31.95	50.99	normal condensation
with less alcohol		
t	P ₁	P ₂ Rem.
15.1	33.44	33.77 V + L ₁ + L ₂
22.9	39.45	- "
22.95	-	39.91 "
31.55	47.16	47.48 "
t	P	Rem.
31.75	47.46	V + L ₁ + L ₂
34.2	49.81	"
35.1	50.76	"
35.37 crit.t.	51.99	"
P ₁ and P ₂ = pressures resp. at the beginning and end of condensation.		
P = middle pressure		

Ethane (C_2H_6) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Kuenen and Robson, 1899

t	P ₂	Rem.
14.97	32.97	V + L
t	P	Rem.
31.90 crit.t.	46.25	
31.95	46.34	
32.15	46.49	
32.55	46.90	
34.85	46.05	
39.15	53.23	V + L ₁ + L ₂
40.67 crit.t.	54.90	
with more alcohol		
t	P	Rem.
32.65 crit.t.	47.12	
32.75	47.16	
32.95	47.30	V + L ₁ + L ₂
40.75 crit.t.	54.68	

with still more alcohol		
t	P ₂	Rem.
14.95	32.81	V + L
32.75 crit.t.	47.04	V + L ₁ + L ₂
32.95	47.26	
Ethane (C ₂ H ₆) + Propyl alcohol (C ₃ H ₈ O)		
Kuenen and Robson, 1899		
t	P	Rem.
38.67 crit.t.	52.78	V + L ₁ + L ₂
38.75	52.85	
38.95	53.12	
39.95	54.09	
41.7 crit.t.	56.01	
39.55	54.22	Sat.t. L ₁ + L ₂ retrograde con- densation.
39.75	54.47	
40.35	55.39	
41.75	57.43	
42.2	58.22	
43.35	59.81	
with more alcohol		
t	P ₂	Rem.
14.96	32.76	V + L
31.8	46.17	normal condens.
31.96	46.35	
38.05	52.25	
38.75	53.03	V + L ₁ + L ₂
38.85	53.09	normal condens.
39.65	53.91	
38.82	53.14	L ₁ + L ₂
38.95	53.27	
39.65	54.29	
40.55	55.70	C. S. T lower
43.35	59.76	
49.75	68.83	
55.95	75.76	
82.1	103.2	retrograd con-
91.4	106	dens.
Ethane (C ₂ H ₆) + Butyl alcohol (C ₄ H ₁₀ O)		
Kuenen and Robson, 1899		
t	P	Rem.
14.95	32.86	L + V
22.9	38.88	
31.95	46.66	
33.35	48.04	
41.23	56.55	
50.15	68.49	

with less alcohol		
t	P	
15.3	33.48	L + V
22.95	39.36	
31.95	47.07	
38.1 crit.t.	-	L + L ₁ + L ₂
38.55	53.67	
38.75	53.97	
39.8	55.04	
38.75	54.22	sat.t. L ₁ + L ₂
39.75	55.81	
39.95	56.19	
50.0	70.04	
60.0	81.78	
Ethane (C ₂ H ₆) + Amyl alcohol (C ₅ H ₁₂ O)		
Kuenen and Robson 1899		
t	P	Rem.
14.95	31.78	L + V normal con- dens.
31.95	46.12	
52.55	68.85	
with less alcohol		
t	P	Rem.
14.95	33.34	L ₁ + L ₂ + V normal condens.
31.95	47.16	
41.95	57.99	
59.5	80.13	
69.9	93.12	
78.15	101.0	
with still less alcohol		
t	P	Rem.
14.95	33.59	L + V normal con- dens.
31.95	47.37	
43.15	59.91	C.S.T. lower
44.95	62.40	
45.75	63.46	
50.35	69.56	
55.77	75.27	
100.0	115.6	retrograd condens.
107.6	118.2	

Propane (C_3H_8) + Methyl alcohol (CH_4O)

Kuenen, 1897

C.S.T.	P	C.S.T.	P
21.15	10	18.6	55
20.85	11	18.05	70
20.8	13	17.85	79
20.05	23	17.8	82
19.85	26	17.65	85
19.4	34.5	17.5	93
19.2	39	17.4	95
19.0	46	17.2	100

Propane (C_3H_8) + Methyl ricinoleate ($C_{19}H_{36}O_3$)

Hixson and Bockelmann, 1942

10.5 vol % sat. t. = 91.3°

Butane (C_4H_{10}) + Methyl alcohol (CH_4O)

Timmermans, 1907

C.S.T. = 16.6° dt/dp (20-150Kg/cm²) = +0.007

Kuenen, 1911

C.S.T. = 17.0°

Butane (C_4H_{10}) + Ethyl alcohol (C_2H_6O)

Kuenen, 1911

C.S.T. = 37.5°

Butane (C_4H_{10}) + Methane-thiol (CH_4S)

Lecat, 1949

%	b. t.
0	0.6
25	-0.5 Az
100	6.3

Isobutane (C_4H_{10}) + Methyl alcohol (CH_4O)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T. = 20.1° dt/dp (10-140kg/cm²) = +0.008Isobutane (C_4H_{10}) + Methane-thiol (CH_4S)

Brooks and Nixon, 1953

Az : 17.5 mol% -13.0°

Pentane (C_5H_{12}) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	36.15	
7	30.8 Az	-1.3
100	64.65	

Zieborak, Maczynska and Maczynski, 1956

C.S.T. = 14°

Kuenen, 1897 and 1911

C.S.T.	P
19.4	0
19.75	15.5
20	27
20.25	40
21.8	91
22.0	100

Mondain-Monval and Quiquerez, 1944

C.S.T. = 14.5°

Pentane (C_5H_{12}) + Ethyl alcohol (C_2H_6O)
 Ishii, 1935

mol%	P			
	-10°	0.0°	10°	20°
100	6.10	12.30	23.90	44.55
95	50.7	79.5	116.8	190.5
90	81.8	134.1	188.1	309.5
85	101.3	168.1	242.1	385.0
80	114.4	188.0	281.5	433.6
75	123.4	199.3	304.7	459.7
70	129.0	207.3	316.8	476.3
65	132.7	213.1	322.9	488.8
60	135.3	217.2	328.0	498.4
55	137.1	220.0	331.7	505.3
50	138.1	222.1	334.8	510.5
45	138.4	223.8	337.5	514.6
40	138.4	225.4	340.0	517.8
35	138.5	226.5	341.9	520.5
30	139.0	227.3	343.3	522.8
25	"	227.5	344.2	524.3
20	"	227.6	345.0	524.5
15	"	227.5	344.5	524.4
10	138.9	227.3	344.3	522.3
5	138.7	226.8	343.6	516.0
0	138.3	222.0	340.4	505.6

mol%	P ₁			
	-10°	0.0°	10°	20°
100	44.8	67.5	94.0	148.0
95	76.0	123.5	166.5	269.0
90	95.6	157.0	221.3	345.8
85	108.8	177.3	261.5	395.4
80	117.9	188.4	284.7	422.7
75	123.6	196.8	296.8	439.5
70	127.4	202.6	304.0	452.3
65	130.0	206.7	309.0	462.2
60	131.8	209.7	313.5	469.5
55	132.7	211.6	316.8	475.0
50	133.1	213.3	319.5	479.3
45	"	214.9	322.0	482.8
40	133.2	216.0	324.0	485.5
35	133.7	216.8	325.0	487.8
30	133.8	217.0	326.7	489.8
25	134.0	217.2	327.5	490.5
20	134.2	217.3	328.0	491.4
15	134.4	217.5	328.3	493.0
10	135.0	218.2	331.5	495.0
5	138.3	222.0	340.4	500.6

mol%	P ₂			
	-10°	0.0°	10°	20°
100	5.9	12.0	22.8	45.2
95	5.8	11.6	21.6	50.5
90	5.7	11.1	20.8	39.2
85	5.6	10.7	20.0	38.2
80	5.5	10.5	"	37.0
75	5.4	"	19.8	36.8
70	5.3	"	18.9	36.5
65	"	"	18.7	36.2
60	"	"	18.2	35.8
55	5.3	10.5	18.0	35.5
50	"	"	"	35.3
45	"	"	"	35.0
40	"	"	17.9	"
35	"	"	"	"
30	5.2	"	17.5	34.5
25	5.0	10.4	"	34.0
20	4.8	10.2	17.3	33.0
15	4.5	9.8	16.0	29.3
10	4.2	8.6	12.1	21.0

Lecat, 1949

%	b. t.	Dt mix
0	36.15	
4	34.2 Az	
5	-	-1.0
100	78.3	

Poppe, 1934

Two liquid phases lower than 0°

 Pentane (C_5H_{12}) + Propyl alcohol (C_3H_8O)

Beck, 1928

vol%	f. t.
100	-127
71.5	-150 -165
62.5	-180
50	-170
0	-131

 Pentane (C_5H_{12}) + Isopropyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	36.15	
6	35.35 Az	
10	-	-2.0
100	82.4	

 Pentane (C_5H_{12}) + Tert. Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	36.15
3	35.9
100	82.45

Pentane (C_5H_{12}) + Ethane-thiol (C_2H_6S)

Lecat, 1949

%	b. t.	Dt mix
0	36.15	
20	-	-0.8
57	32.6 Az	
100	35.8	

Denyer, Fidler and Lowry, 1949

Az : 55 mol% (51 wt%) 30.46° $d^{20}_D = 0.714$
 $n^{20}_D = 1.3864$

Isopentane (C_5H_{12}) + Methyl alcohol (CH_3O)

Lecat, 1949

%	b. t.	Dt mix
0	27.95	-
4	24.55 Az	-
15	-	-2.0
100	64.65	-

Kuenen, 1911

C.S.T. = 10.5°

Isopentane (C_5H_{12}) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	27.95	
3.5	26.75 Az	
5	-	-1.0
100	78.3	

Kuenen, 1911

C.S.T. = -30°

Isopentane (C_5H_{12}) + Isopropyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	27.95	
5	27.7 Az	
50	-	-2.8
100	82.4	

Isopentane (C_5H_{12}) + sec. Butyl alcohol ($C_4H_{10}O$)

Roland, 1928

mol%	P_1
	0.32°
100	260.6
76.61	248.8
54.30	228.5
39.02	209.0
24.84	174.1
6.77	80.4

Veltmans, 1926

%	d	(α) _D
	20°	
0	0.6198	0
20	0.6504	3.74
39.9	0.6841	6.78
60	0.7210	9.13
80	0.7618	11.35
100	0.8069	13.87

Isopentane (C_5H_{12}) + Ethanethiol (C_2H_6S)

Lecat, 1949

%	b. t.
0	27.95
15	27.1 Az
100	35.8
10% 18°	Dt = -0.5

Denyer, Fidler and Lowry, 1949

Az : 32 mol% (29 wt%) 25.72°

 $n^{20}_D = 1.3703$

Hexane (C_6H_{14}) + Methyl alcohol (CH_4O)

Ferguson, 1932

mol%		P	P ₁	P ₂
L	V			
45.0°				
100	100	327.9	-	327.9
92.82	51.9	611.0	293.9	317.1
92.26	52.55	601.7	285.6	316.1
91.85	52.61	606.9	287.6	319.3
90.98	50.14	617.2	307.7	311.5
89.57	50.70	618.1	304.7	313.6
87.49	50.70	624.1	307.7	316.4
77.60	49.93	628.3	314.7	313.6
76.87	49.19	630.3	320.2	310.1
51.33	49.88	630.2	315.8	314.4
24.18	49.33	626.4	317.5	308.9
11.37	48.44	619.3	319.3	300.0
4.5	41.72	549.8	320.4	229.4
0	0	333.0	333.0	-

Schukarew, 1910

%		p
43.8°		
100		290.8
83.7		509
78.6		529
68.95		539
54.79		554
33.70		556
32.16		557
25.50		547
17.30		550
0		309.5

Lecat, 1949

%	b. t.	Dt mix
0	68.8	
28	50.5	Az
50	-	
100	64.65	-3.5

Kuenen, 1897

t	P	t	P
C. S. T.			
37.0	0	41.4	143
37.9	33	42.4	175
38.6	55	42.6	182
39.4	81	43.8	228
40.25	105	44.8	264
41.3	141		
C. V. T.			
0%		minimum	
234.8	29.6	210.2	56.0
100%			
241.2	80.0		

Rothmund, 1898

%	sat. t	%	sat. t.
75.96	4.45	30.41	42.52
73.60	9.95	22.89	42.85
67.75	21.67	13.76	40.05
65.60	24.52	9.65	36.60
59.39	32.40	4.56	23.95
49.60	39.17	3.35	15.22
41.33	41.10	3.32	9.00
36.44	41.82		

Bingham, 1907

C. S. T. = 42.8°

Howard and Patterson, 1926

C. S. T. : 20% = 42.0°

Freed, 1933

C. S. T. = 34.6

Krishnan, 1935

C. S. T. : 30 % 29°

Sieg, 1951				Smirnov and Predvoditelev, 1954 (fig.)					
t	L ₁	mol %	L ₂	mol%	d				
					25.0°	30.02°	36.10°	38.98°	45.84°
10	85		-	0	0.657	0.652	0.646	0.643	0.636
15	82		-	10	0.659	0.655	0.649	0.646	0.640
20	80		-	15	0.660	0.656	0.650	0.647	0.641
22	79		-	20	-	0.659	0.653	0.650	0.642
25	78		20	25	-	-	0.656	0.652	0.645
30	74		22	40	-	-	0.665	0.662	0.654
32	66		27	50	-	-	-	0.670	0.663
34		50	36	65	-	-	0.690	0.685	0.680
				80	0.725	0.720	0.715	0.714	0.707
				90	0.750	0.747	0.744	0.740	0.735
				100	0.787	0.785	0.776	0.774	0.767
Quantie, 1954				Wolf, 1943					
C.S.T. = 32.6 ° 28.1°				mol% σ					
				20°					
				0 22.31					
				10 19.46					
				25 18.60					
				50 18.58					
				75 18.56					
				90 18.54					
				100 18.52					
Zieborak, Maczynska and Maczynski, 1956				Smirnov and Predvoditelev, 1954 (fig.)					
C.S.T. = 34.8°				mol% velocity of sound (m/sec.)					
				20° 25° 30° 33°					
				100 1140 1120 1105 1095					
				95 1120 1100 1085 1075					
				88 1105 1085 1065 1055					
				83 1095 1080 1060 1050					
				80 - 1078 1058 1045					
				75 - - 1055 1040					
				25 - - - 1040					
				10 1105 1083 1060 1045					
				0 1120 1095 1074 1060					
Kogan, Deizenrot and al., 1956				mol% velocity of sound (m/sec.)					
				35° 36.6 40° 43°					
				100 1090 1085 1070 1060					
				95 1070 1060 1050 1040					
				88 1045 1040 1030 1020					
				83 1040 1035 1025 1015					
				75 1035 1030 1015 1005					
				65 1030 1025 1010 995					
				50 - 1020 1008 994					
				35 1030 1022 1008 995					
				25 1033 1025 1010 996					
				10 1038 1032 1016 1004					
				0 1050 1042 1026 1013					
Timmermans and Kohnstamm, 1909 - 1910									
C.S.T. = 42.2° dt/dp (1-105 kg/cm ²) = +0.032									
Leibnitz, "Konnecke and Niese, 1957									
t	d		σ interface (L ₁ /L ₂)						
	L ₁	L ₂							
20	0.7924	0.6679	0.283						

Krishnan, 1935			
Depolarization at 29-50°			
Bennett and Vines, 1955 (fig)			
mol %	78.0°	K.10 ⁶ 98.4°	121.4°
0	42.4	47.6	53.8
25	45.8	50.8	57.2
50	48.0	53.0	59.2
75	48.4	53.8	59.8
100	46.8	51.9	57.6
K = thermal conductivity (cal cm ⁻¹ sec ⁻¹ deg ⁻¹)			
Gerts and Filippov, 1956 (fig.)			
Heat conductivity, expressed as function of the potential difference ξ on the Weatstone bridge .			
t	L ₁	L ₂	L
	33.7%		39%
34.85	5.65	5.20	-
35.00	5.61	5.22	-
35.25	5.53	5.28	-
35.45		5.38	5.46
35.50		"	"
35.70		"	"
Wolf, Pahlke and Wehage, 1935			
Q mix/mole alcohol 20° = -5900			
Hexane (C ₆ H ₁₄) + Ethyl alcohol (C ₂ H ₆ O)			
Lecat, 1949			
%	b. t.	Dt mix	
0	68.8		
21	58.68 Az		
35	-		
100	78.38	-2.55	
Kuenen, 1897			
C.S.T. = -65°			

Smyth and Stoops, 1925				
t	d			
	1.53	5.79	9.62	20.76
	mol%			
-90	0.7820	0.7842	0.7844	0.7945
-80	0.7742	0.7755	0.7763	0.7857
-70	0.7660	0.7670	0.7682	0.7771
-60	0.7574	0.7582	0.7593	0.7703
-50	0.7483	0.7495	0.7525	0.7611
-40	0.7397	0.7408	0.7430	0.7518
-30	0.7310	0.7321	0.7344	0.7423
-20	0.7220	0.7235	0.7256	0.7330
-10	0.7130	0.7148	0.7169	0.7240
0	0.7040	0.7066	0.7076	0.7143
+10	0.6956	0.6955	0.6983	0.7051
20	0.6859	0.6874	0.6890	0.6960
30	0.6766	0.6782	0.6797	0.6864
40	0.6671	0.6690	0.6760	0.6770
50	0.6577	0.6589	0.6601	0.6670
60	0.6476	0.6480	0.6501	0.6571
Harms, 1938				
mol%	d			
	6°		30°	
0	0.68707		0.66527	
0.497	0.68723		0.66538	
1.179	0.68747		0.66556	
2.019	0.68779		0.66579	
4.864	0.68906		0.66704	
7.955	0.69054		0.66839	
13.914	0.69365		0.67142	
20.389	0.69745		0.67516	
24.511	0.70006		0.67778	
50.064	0.72049		0.69840	
80.753	0.75981		0.73855	
16.618	0.79250		0.77182	
100	0.80133		0.78078	
Smyth and Stoops, 1925				
t	ϵ			
	1.53	5.79	9.62	20.76
	mol%			
-90	2.093	2.160	2.255	3.418
-80	2.077	2.144	2.248	3.360
-70	2.060	2.129	2.232	3.295
-60	2.045	2.114	2.214	3.225
-50	2.030	2.098	2.197	3.156
-40	2.016	2.083	2.179	3.075
-30	2.002	2.068	2.162	2.996
-20	1.989	2.034	2.145	2.913
-10	1.976	2.040	2.128	2.830
0	1.964	2.026	2.111	2.755
+10	1.952	2.014	2.086	2.687
20	1.940	2.002	2.082	2.622
30	1.928	1.990	2.069	2.563
40	1.914	1.978	2.054	2.507
50	1.898	1.968	2.039	2.453
60	1.882	1.958	2.025	2.403

HEXANE + PROPYL ALCOHOL

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Trieschmann, 1935

mol%	σ
	22°
0	18.49
25.76	18.52
49.18	18.64
68.45	19.05
78.14	19.58
89.23	20.73
100.00	21.96

Wolf, 1948

mol%	σ
	20°
0	22.08
10	20.67
25	19.46
50	18.71
75	18.60
90	18.54
100	18.52

Wolf, Pahlke and Wehage, 1935 (fig.)

mol%	Q mix by mol alcohol
	at room temperature
0.1	-5700
1	3900
5	1500
10	990
20	600
25	500
50	260
75	120

 Hexane (C_6H_{14}) + Propyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	68.8	
4	65.65 Az	
41	-	-2.4
100	97.2	

Wolf, Pahlke and Wehage, 1935 (fig.)

mol%	Q mix (by mol alcohol)
	room temperature
0.1	-5600
1	3800
5	1500
10	1000
20	600
25	500
50	240
75	100

 Hexane (C_6H_{14}) + Isopropyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	68.8	-
23	62.3 Az	-
26	-	-2.7
100	82.4	-

Poltz, 1936

mol %	d
	22°
0	0.6709
17.920	0.6814
33.283	0.6934
47.034	0.7068
59.009	0.7200
69.742	0.7278
79.276	0.7476
87.858	0.7815
100	0.7840

mol%	n	5893 Å	5000 Å	4500 Å	4000 Å
0	1.3796	1.3834	1.3866	1.3914	
17.920	1.3778	1.3817	1.3850	1.3898	
33.283	1.3771	1.3808	1.3841	1.3889	
47.034	1.3767	1.3804	1.3837	1.3886	
59.009	1.3766	1.3803	1.3835	1.3884	
69.742	1.3765	1.3802	1.3835	1.3884	
79.276	1.3765	1.3802	1.3835	1.3884	
87.858	1.3767	1.3804	1.3836	1.3884	
100	1.3769	1.3806	1.3838	1.3886	

HEXANE + BUTYL ALCOHOL

mol%	(α) magn.			
	5893 Å	5000 Å	4500 Å	4000 Å
0	1.553	2.216	2.794	3.840
17.920	1.443	2.059	2.595	3.387
33.283	1.351	1.927	2.424	3.167
47.034	1.268	1.807	2.277	2.971
59.009	1.196	1.707	2.145	2.796
69.742	1.129	1.610	2.029	2.641
79.276	1.071	1.520	1.919	2.505
87.858	1.020	1.445	1.822	2.382
100	0.940	1.342	1.695	2.216

mol%	(α) magn.		
	3500 Å	3000 Å	2800 Å
0	4.963	7.236	8.647
17.920	4.622	6.742	8.065
33.283	4.316	6.312	7.587
47.034	4.063	5.937	7.114
59.009	3.816	5.605	6.740
69.742	3.609	5.303	6.374
79.276	3.431	5.045	6.060
87.858	3.262	4.800	5.774
100	3.031	4.458	5.359

Girard and Abadie, 1939 (fig.)

w.l. (cm)	dispersion	absorption
60% 20°		
7	0.08	0.14
10	0.10	0.18
30	0.30	0.37
50	0.45	0.47
100	0.75	0.47
200	0.90	0.28
500	0.95	0.18

$$\text{dispersion} = (\epsilon' - \epsilon_0) / (\epsilon_1 - \epsilon_0)$$

$$\text{absorption} = \epsilon'' / (\epsilon_1 - \epsilon_0)$$

Wolf, Pahlke and Wehage, 1935 (fig.)

mol%	Q mix (mole alcohol)	
	room temperature	
0.1	-5900	
1	3800	
6	1500	
10	1000	
20	760	
25	670	
50	350	
75	150	

Hexane (C₆H₁₄) + Butyl alcohol (C₄H₁₀O)

Trieschmann, 1935

mol%	σ
22°	
100.00	24.3
59.23	20.2
35.11	19.22
23.58	18.85
18.48	18.72
10.96	18.55
6.27	18.53
0	18.49

Wolf, 1943

mol%	σ
20°	
100	24.20
90	23.00
75	21.48
50	19.73
25	18.93
10	18.62
0	18.52

Wolf, Pahlke and Wehage, 1935

mol%	Q mix (mole alcohol)
at room temperature	
0.1	-5500
1	3900
5	1500
10	1000
20	580
25	480
50	200
75	100

Lecat, 1949

Hexane (C₆H₁₄) (b.t.=68.8) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Isobutyl alcohol	(C ₄ H ₁₀ O)	108.0	2.5	68.1	-2.35 (46%)
Sec. Butyl alcohol	(C ₄ H ₁₀ O)	99.5	8.5	67.1	-0.7 (8%)
Tert. Butyl alcohol	(C ₄ H ₁₀ O)	82.45	23	64.2	-

Hexane (C ₆ H ₁₄) + Tert. Butyl Alcohol (C ₄ H ₁₀ O)		Hexane (C ₆ H ₁₄) + tert. Amyl alcohol (C ₅ H ₁₂ O)		
Hoffmann, 1943		Lecat, 1949		
M	Infrared absorption coefficient	%	b. t.	Dt mix
	21.5	0	68.8	
7.037	0.00399	4	68.5 Az	-0.6
3.935	0.00579	100	102.35	
1.903	0.00925			
0.9668	0.01459			
0.4569	0.02392			
0.1869	0.04280			
0.1041	0.05596			
0.0557	0.06817			
Wolf, Pahlke and Wehage, 1935 (Fig.)		Hexane (C ₆ H ₁₄) + Hexyl alcohol (C ₆ H ₁₄ O)		
mol%	Q mix (mole alcohol)	Wolf, 1943		
	room temperature	mol%	σ	
0.1	-5000	100	20°	26.15
1	3500	90		25.27
5	1500	75		23.91
10	900	50		21.28
20	480	25		19.45
25	400	10		18.80
50	150	0		18.52
75	50			
Hexane (C ₆ H ₁₄) + Isoamyl alcohol (C ₅ H ₁₂ O)		Trieschmann, 1935		
Muchin, 1913		mol%		
c	d	σ		
	18.7°			
0.0000	0.6660	22°		
0.8100	0.6709	100		26.2 ₃
2.4366	0.6778	63.20		22.8 ₁
3.2402	0.6795	42.91		20.6 ₆
12.183	0.6918	25.33		19.4 ₅
16.201	0.7024	0		19.4 ₉
100%	0.8116			
c = g. alcohol in 100cc hexane				

Hexane (C_6H_{14}) + 2-Octyl alcohol d ($C_8H_{18}O$)

Rule, Smith and Harrower, 1933

mol%	(α) $_{D_{46}^{20}}$	mol%	(α) $_{D_{46}^{20}}$
20°			
5	+19.6	37.2	+16.91
9.9	18.6	39.9	17.02
15.1	18.1	45.3	16.79
20.3	17.6	55.1	16.45
25.3	17.54	61.8	16.10
28.3	17.62	70.9	15.87
31.3	17.29	81.9	15.40
34.5	16.73	100	15.24

Hexane (C_6H_{14}) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr and Harwood, 1951

f. t.	%
-20.0	2.9
-10.0	28.8
0.0	75.6

Hexane (C_6H_{14}) + Dodecyl alcohol ($C_{12}H_{26}O$)

Hoerr and Harwood, 1951

f. t.	%
-10.0	0.5
0.0	8.5
+10.0	49.0
20.0	87.9

Hexane (C_6H_{14}) + Tetradecyl alcohol ($C_{14}H_{30}O$)

Hoerr and Harwood, 1951

f. t.	%
0.0	0.1
10.0	3.6
20.0	31.5
30.0	75.0

Hexane (C_6H_{14}) + Hexadecyl alcohol ($C_{16}H_{34}O$)

Hoerr and Harwood, 1951

f. t.	%
20.0	2.6
30.0	29.7
40.0	73.0

Hexane (C_6H_{14}) + Octadecyl alcohol ($C_{18}H_{38}O$)

Hoerr and Harwood, 1951

f. t.	%
30.0	4.5
40.0	39.4
50.0	79.4

Hexane (C_6H_{14}) + Allyl alcohol (C_3H_6O)

Lecat, 1949

%	b. t.
0	68.8
-	56.7 Az
100	96.85

Hexane (C_6H_{14}) + Glycol ($C_2H_6O_2$)

Leibnitz, Konnecke and Niese, 1957

t	d		σ interface
	L_1	L_2	(L_1/L_2)
20	1.1119	0.6600	16.125
40	.0978	.6431	15.891
60	.0826	.6247	15.661

Hexane (C_6H_{14}) + Diglycol ($C_4H_{10}O_3$)

Leibnitz, Konnecke and Niese, 1957

t	d		σ interface
	L_1	L_2	(L_1/L_2)
20	1.1108	0.6600	9.929
40	.0952	.6427	9.860
60	.0800	.6247	9.707

Hexane (C_6H_{14}) + Triglycol ($C_6H_{14}O_4$)

Leibnitz, Konnecke and Niese, 1957

t	d	σ interface
	L_1	L_2 (L_1/L_2)
20	1.1156	0.6600
40	.0985	.6429
60	.0805	.6259

 Hexane (C_6H_{14}) + Benzyl alcohol (C_7H_8O)

Maman, 1934

C.S.T. = 50.6°

Mulliken and Wakeman, 1935

C.S.T. : 50 vol% 57°

 Hexane (C_6H_{14}) + Ethylenechlorohydrine (C_2H_5OCl)

Lecat, 1949

%	b. t.	Dt mix
0	68.8	
13	68.0	Az
50	-	
100	128.6	-2.0

 Hexane (C_6H_{14}) + 1-Propanethiol (C_3H_8S)

Lecat, 1949

%	b. t.
0	68.8
62	65.2
100	67.3

12% 18° Dt = -1.5

Denyer, Fidler and Lowry, 1949

mol%	mol%	b. t.	b. t.
V	L	V	L
760 mm			
0	0	68.75	49.0
10.0	6.5	67.64	54.2
13.5	8.3	67.36	63.3
17.5	11.8	66.91	68.0
19.1	13.6	66.76	73.1
26.5	21.0	65.97	79.7
31.7	25.8	65.52	88.7
34.2	28.9	65.27	100
41.7	37.0	64.93	100

mol%	n_D
20°	
17.36	1.3812
36.21	1.3899
52.15	1.3994
65.16	1.4083
79.05	1.4187

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
55.7	52.6	64.35	0.7406	1.4016

 Hexane (C_6H_{14}) + 2-Methyl-2-propanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
75.0	75.8	63.78	0.7583	1.4074

2-Methylpentane (C_6H_{14}) + Benzyl alcohol
(C_7H_8O)

Maman, 1934

C.S.T. : 54.4°

2-Methylpentane (C_6H_{14}) + 1-Propanethiol
(C_3H_8S)

Denyer, Fidler and Lowry, 1949

mol%		
V	L	f.t.
760 mm		
0	0	60.40
10.3	9.2	59.66
24.0	23.8	59.25
30.5	31.5	59.20
33.5	34.5	59.26
44.3	50.5	59.77
47.7	54.9	59.96
58.0	68.3	61.07
100	100	67.82

mol%	n_D^{20}
19.50	1.3799
37.38	1.3832
51.36	1.3974
66.49	1.40825
78.46	1.4180
90.76	1.42775

Az	mol %	wt %	b.t.	d^{20}	n_D^{20}
	26.2	23.9	59.20	0.6889	1.3835

2-Methylpentane (C_6H_{14}) + Thiols

Denyer, Fidler and Lowry, 1949

Az	mol %	wt %	b.t.	d^{20}	n_D^{20}
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2-Methylpentane + 2-Propanethiol (C_3H_8S)

78.1 75.9 51.70 0.7651 1.40795

2-Methylpentane + 2-Methyl-2-propanethiol ($C_4H_{10}S$)

29.5 30.4 59.35 0.6896 1.3831

Isohexanes (C_6H_{14}) + Thiols

Denyer, Fidler and Lowry, 1949.

Az

mol%	wt%	b.t.	d^{20}	n_D^{20}
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3-Methylpentane (C_6H_{14}) + 1-Propanethiol (C_3H_8S)

37.0 34.2 61.26 0.71265 1.3921

3-Methylpentane (C_6H_{14}) + 2-Propanethiol (C_3H_8S)

88.3 87.0 52.40 0.7885 1.4162

3-Methylpentane (C_6H_{14}) + 2-Methyl-2-Propanethiol
($C_4H_{10}S$)

45.4 46.5 61.51 0.7178 1.3936

2,2-Dimethylbutane (C_6H_{14}) + Ethanethiol (C_2H_6S)

87 83 34.41 0.7911 1.4140

2,2-Dimethylbutane (C_6H_{14}) + 2-Propanethiol
(C_3H_8S)

40.6 37.7 47.41 0.7016 1.3857

2,3-Dimethylbutane (C_6H_{14}) + 1-Propanethiol
(C_3H_8S)

18.1 16.3 57.54 0.6852 1.3848

2,3-Dimethylbutane (C_6H_{14}) + 2-Propanethiol
(C_3H_8S)

70.0 67.5 51.24 0.7547 1.4048

2,3-Dimethylbutane (C_6H_{14}) + 2-Methyl-2-Propane-
thiol ($C_4H_{10}S$)

20.4 21.1 57.82 0.6821 1.3815

2,3-Dimethylbutane (C_6H_{14}) + 2-Methyl-2-propane-
thiol ($C_4H_{10}S$)

20.4 21.1 57.82 0.6821 1.3815

2,3-Dimethylbutane (C ₆ H ₁₄) (b.t. = 58.0) + Alcohols					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Methyl alcohol	CH ₄ O	64.65	20	45.0	-2.2 (20%)
Ethyl alcohol	C ₂ H ₆ O	78.3	12	51.5	-3.7 (50%)
Propyl alcohol	C ₃ H ₈ O	97.2	6	56.8	-
Isopropyl alcohol	C ₃ H ₈ O	82.4	9	53.8	-3.3 (50%)
sec.Butyl alcohol	C ₄ H ₁₀ O	99.5	8	57.75	-
tert.Butyl alcohol	C ₄ H ₁₀ O	82.45	13	55.3	-
Allyl alcohol	C ₃ H ₆ O	96.85	-	56.7	-

2,3-Dimethylbutane (C ₆ H ₁₄) + Benzyl alcohol (C ₇ H ₈ O)					
Maman, 1934					
C.S.T. : 54.4°					

Methyl diethylmethane (C ₆ H ₁₄) + Benzyl alcohol (C ₇ H ₈ O)					
Maman, 1934					
C.S.T. : 50.1°					

Trimethyl ethylmethane (C ₆ H ₁₄) + Benzyl alcohol (C ₇ H ₈ O)					
Maman, 1934					
C.S.T. : 62.9°					

Heptane (C ₇ H ₁₆) + Methyl Alcohol (CH ₄ O) Sieg,1951			
sat. t		mol %	
		L ₁	L ₂
20	90		18
30	88		21
40	83		29
45	79		36
50		55	

Kogan, Deizenrot and al., 1956			
%		sat.t.	
L ₁	L ₂		
3.36	81.90	2	
3.75	78.91	10	
6.6	77.6	20	
9.19	67.4	40	

Lecat, 1949.			
%		b.t.	
0	98.4		
51.5	59.1	Az	45.7
100	64.65		

Zieborak, Maczynska and Maczynski,1956 (fig)			
mol %		b.t.	
		mol %	
		b.t.	
760 mm			
100	64.6	78-42	59.0 L ₁ +L ₂
90	59.2	30	59.2
80	59.0	20	60.0
78	59.0 Az	0	98.4
Az : 59.1°		C.S.T. = 51.0°	

Leibnitz, Konnecke and Niese, 1957			
t	d	σ interface	
	L ₁	L ₂	(L ₁ /L ₂)
20	0.7564	0.6875	0.777
30	.7413	.6800	.499
40	.7241	.6746	.232
45	.7148	.6723	.114

Timofejev, 1905			
%		U	
20°			
0		0.490	
74.1		0.568	
100		0.600	

%			Q dil
initial	final	(mole heptane)	
100	94.0	-1051	
94.0	87.6	938	
87.6	82.5	836	
82.5	78.0	749	

Heptane (C_7H_{16}) + Ethyl alcohol (C_2H_6O)

Smyth and Engel, 1929

mol%	P ₁	P ₂
30°		
0	58.2	0
4.00	56.0	22.0
6.84	56.4	47.2
12.36	56.4	56.1
28.03	54.8	62.9
33.42	54.5	63.5
51.51	54.0	65.9
59.34	51.8	68.1
71.74	49.9	69.7
76.87	47.9	71.0
81.54	43.5	73.5
85.50	40.6	73.9
99.02	32.1	79.2
91.73	18.4	87.9
95.45	10.1	87.0
99.13	4.7	77.8
100	0	78.2
50°		
0	141.1	0
5.14	132.3	111.9
11.80	133.6	155.8
30.22	130.5	176.9
43.82	130.0	181.3
58.62	126.6	184.7
66.46	121.5	188.0
73.27	120.0	191.3
77.20	114.9	193.9
82.30	106.2	198.6
87.88	71.2	221.8
92.74	47.2	234.5
97.69	21.6	225.8
100	0	220.0
70°		
0	301.4	0
5.67	265.9	234.4
11.80	274.5	339.8
15.73	272.8	375.2
25.25	225.8	413.8
36.33	274.3	431.6
42.90	269.7	442.4
50.69	269.0	446.7
59.68	267.0	450.7
66.48	259.6	458.1
71.74	252.4	465.3
76.89	251.0	462.8
82.00	245.6	459.3
86.40	227.9	465.5
89.40	183.1	493.4
92.50	129.5	522.3
95.64	83.0	527.0
98.27	44.9	524.5
100	0	539.1

Ferguson, Freed and Morris, 1933

%		P
L	V	
30°		
100.0	100.0	78.3
92.7	67.2	94.3
82.0	48.9	110.0
67.7	40.5	119.4
47.2	37.7	122.0
19.4	36.0	122.0
13.5	35.1	120.5
5.7	31.5	115.2
5.1	32.3	117.1
2.2	28.9	109.0
0.6	22.9	95.0
-	16.7	83.5
0.0	0.0	58.4

Lecat, 1949

%	b.t.	Dt mix
0	98.4	
49	70.9	A3
57	-	
100	78.3	-2.3

Smyth and Stoops, 1929

t	d	
	2.56	42.52
	mol%	
-110	-	-
-100	0.7830	-
-90	0.7749	-
-80	0.7669	-
-70	0.7586	-
-60	0.7503	-
-50	0.7422	-
-40	0.7340	-
-30	0.7259	0.7487
-20	0.7177	0.7400
-10	0.7092	0.7317
0	0.7010	0.7232
+10	0.6927	0.7146
20	0.6843	0.7058
30	0.6760	0.6968
40	0.6671	0.6876
50	0.6582	0.6782
60	0.6494	0.6689
70	0.6404	0.6592

t				d			
				83.00	92.60	100	
				mol%			
-110	-	-	-	-	-	0.9031	
-100	-	-	-	-	-	0.8941	
-90	-	-	-	-	0.8649	0.8852	
-80	0.8369	-	-	0.8562	-	0.8762	
-70	0.8281	-	-	0.8476	-	0.8674	
-60	0.8193	-	-	0.8390	-	0.8586	
-50	0.8108	-	-	0.8303	-	0.8498	
-40	0.8022	-	-	0.8216	-	0.8412	
-30	0.7938	-	-	0.8132	-	0.8327	
-20	0.7851	-	-	0.8048	-	0.8242	
-10	0.7766	-	-	0.7962	-	0.8158	
0	0.7678	-	-	0.7876	-	0.8073	
+10	0.7590	-	-	0.7790	-	0.7988	
20	0.7500	-	-	0.7702	-	0.7901	
30	0.7411	-	-	0.7617	-	0.7816	
40	0.7322	-	-	0.7528	-	0.7727	
50	0.7233	-	-	0.7436	-	0.7638	
60	0.7143	-	-	0.7344	-	0.7547	
70	0.7053	-	-	0.7251	-	0.7456	

Smyth, Engel and Wilson, 1929			
mol%		n _D	
20°			
100	1.36130	66.31	1.37426
99.93	1.36221	61.84	1.37540
94.94	1.36355	50.54	1.37830
92.77	1.36448	38.50	1.38091
90.15	1.36566	30.36	1.38245
84.46	1.36805	20.19	1.38409
78.16	1.37044	11.22	1.38573
74.63	1.37161	0	1.38776
70.55	1.37292		

Smyth and Stoops, 1929							
t		ε					
		2.56	42.52	61.42	83.00	92.60	100
		mol%					
-110	-	-	-	-	-	-	56.4
-100	2.129	-	-	-	-	-	52.9
-90	2.113	-	-	-	-	40.8	49.3
-80	2.099	-	-	-	29.8	38.1	46.1
-70	2.084	-	-	-	28.0	35.6	43.0
-60	2.069	-	-	-	26.3	33.2	40.1
-50	2.053	-	-	-	24.7	31.0	37.4
-40	2.040	-	-	-	23.1	29.0	35.0
-30	2.027	5.80	11.82	-	21.7	27.2	32.7
-20	2.019	5.55	10.49	-	20.3	25.5	30.7
-10	2.003	5.31	9.96	-	18.0	24.0	28.7
0	1.991	5.06	9.43	-	17.8	22.5	27.0
+10	1.980	4.82	8.92	-	16.6	21.1	25.3
20	1.968	4.59	8.40	-	15.5	19.8	23.8
30	1.956	4.36	7.87	-	14.5	18.6	22.4
40	1.944	4.14	7.39	-	13.6	17.4	21.0
50	1.931	3.95	6.92	-	12.7	16.3	19.8
60	1.915	3.76	6.48	-	11.8	15.2	18.7
70	1.900	3.59	6.05	-	11.0	14.2	17.6

Martin and Brown, 1938		
mol%		ε
30°		
10	-	2.30
20	-	2.73
30	-	3.28
40	-	4.08
50	-	5.52
60	-	7.52
70	-	10.21
80	-	13.40
90	-	17.32
100	-	22.40

Timofeev, 1905		
%		U
20°		
0	-	0.490
84.2	-	0.609
88	-	0.603
100	-	0.5933

%		Q dil	
initial	final	(by mole heptane)	
100	93.7	-586	
93.7	88.6	516	
88.6	84.2	505	
(by mole alcohol)			
0	7.2	-797	
7.2	12.6	292	

Heptane (C_7H_{16}) + Propyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	98.4	
38	84.8	Az
40	-	
100	97.2	-1.5

Timofeev, 1905

%	U
0	20° 0.490
16.7	0.524
87.8	0.575
100	0.579

% initial		Q dil (by mole heptane)
100	95.1	-358
95.1	91.5	335
91.5	87.5	322
(by mole alcohol)		
0	4.15	-1015
4.15	10.0	342
10.0	15.4	241
15.4	19.9	183

Heptane (C_7H_{16}) + Isopropyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	98.4	
50	-	
50.5	76.4	Az
100	82.4	-0.3

Heptane (C_7H_{16}) + Butyl alcohol ($C_4H_{10}O$)

Smyth and Engel, 1929

mol%	P ₁	P ₂
0	140.5	0
6.88	135.6	13.8
10.47	132.5	19.0
19.80	130.0	21.2
22.12	130.1	21.2
36.41	126.6	22.0
53.10	115.9	26.0
54.29	114.9	25.8
63.69	108.5	25.1
64.00	109.0	26.9
68.05	105.5	26.1
73.88	94.2	29.3
78.34	22.5	36.0
100	0	33.3

Lecat, 1949

%	b. t.	Dt mix
0	98.4	
17	-	
17.8	93.95	Az
100	117.8	-1.7

Smyth and Stoops, 1929

t	d		10.42		13.83
	3.12	5.25	8.05	mod%	
-90	0.7760	0.7775	0.7798	0.7812	-
-80	0.7679	0.7692	0.7718	0.7732	0.7762
-70	0.7598	0.7612	0.7636	0.7651	0.7680
-60	0.7514	0.7530	0.7552	0.7570	0.7600
-50	0.7432	0.7450	0.7473	0.7489	0.7519
-40	0.7352	0.7369	0.7391	0.7409	0.7432
-30	0.7272	0.7289	0.7311	0.7329	0.7355
-20	0.7192	0.7208	0.7231	0.7249	0.7267
-10	0.7108	0.7126	0.7148	0.7164	0.7184
0	0.7024	0.7040	0.7062	0.7081	0.7101
+10	0.6940	0.6958	0.6980	0.6997	0.7017
20	0.6854	0.6872	0.6895	0.6911	0.6936
30	0.6769	0.6788	0.6810	0.6826	0.6855
40	0.6681	0.6700	0.6722	0.6739	0.6767
50	0.6591	0.6610	0.6631	0.6650	0.6682
60	0.6502	0.6520	0.6539	0.6559	0.6579
70	0.6412	0.6428	0.6447	0.6467	0.6512
80	0.6320	0.6333	0.6350	0.6372	0.6424
90	0.6239	0.6240	0.6257	-	0.6334

t					
d					
mol%					
	26.55	44.51	61.52	80.42	100
-90	0.7948	0.8134	0.8261	0.8604	-
-80	0.7868	0.8054	0.8182	0.8526	0.8872
-70	0.7789	0.7974	0.8101	0.8448	0.8793
-60	0.7709	0.7895	0.8022	0.8369	0.8713
-50	0.7630	0.7815	0.7942	0.8289	0.8634
-40	0.7552	0.7736	0.7862	0.8211	0.8556
-30	0.7470	0.7657	0.7782	0.8132	0.8479
-20	0.7388	0.7577	0.7701	0.8053	0.8402
-10	0.7305	0.7494	0.7621	0.7974	0.8328
0	0.7222	0.7414	0.7540	0.7897	0.8256
+10	0.7139	0.7331	0.7458	0.7820	0.8173
20	0.7053	0.7247	0.7376	0.7737	0.8098
30	0.6970	0.7160	0.7289	0.7657	0.8022
40	0.6882	0.7072	0.7201	0.7574	0.7945
50	0.6796	0.6987	0.7115	0.7491	0.7862
60	0.6709	0.6898	0.7022	0.7410	0.7787
70	0.6616	0.6809	0.6930	0.7322	0.7703
80	0.6525	0.6710	0.6839	0.7231	0.7616
90	0.6431	0.6616	-	0.7140	0.7527

Wilson and Richards, 1932

t	d	v	d	v
0 mol%		25.70 mol%		
25.0	0.6793	1130	0.7004	1139
35.0	0.6708	1087	0.6917	1095
50.0	0.6575	1025	0.6788	1031
48.43 mol%		74.57 mol%		
25.0	0.7252	1155	0.7603	1190
35.0	0.7161	1113	0.7519	1148
50.0	0.7034	1053	0.7392	1088
82.43 mol%		100 mol%		
25.0	0.7735	1205	0.8061	1245
35.0	0.7656	1167	0.7987	1205
50.0	0.7526	1113	0.7867	1156

v = sound velocity (m/sec.)

Smyth, Engel and Wilson, 1929

mol%		n _D	
20°			
71.33		1.39448	
66.79		1.39377	
62.33		1.39313	
57.51		1.39252	
42.05		1.39069	
30.11		1.38945	
16.73		1.38833	
9.03		1.38788	
0		1.38767	

t		ε			
3.12		5.25		8.05	
				10.42	
				13.83	
mol%					
-90	2.113	2.131	1.196	2.223	-
-80	2.098	2.118	2.168	2.208	2.360
-70	2.082	2.105	2.148	2.194	2.333
-60	2.068	2.092	2.134	2.179	2.308
-50	2.052	2.080	2.122	2.164	2.285
-40	2.041	2.066	2.109	2.149	2.263
-30	2.028	2.054	2.096	2.131	2.241
-20	2.0116	2.042	2.084	2.123	2.221
-10	2.004	2.032	2.073	2.110	2.203
0	1.993	2.021	2.063	2.100	2.186
+10	1.982	2.011	2.053	2.088	2.167
20	1.972	2.001	2.044	2.077	2.153
30	1.961	1.991	2.034	2.068	2.141
40	1.950	1.980	2.024	2.058	2.132
50	1.936	1.969	2.013	2.046	2.118
60	1.921	1.955	2.001	2.032	2.105
70	1.907	1.939	1.986	2.019	2.099
80	1.890	1.921	1.968	2.003	2.070
90	1.872	1.902	1.949	1.985	2.042

Lecat, 1949

Heptane (C₇H₁₆) (b.t.=98.4) + Butyl alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Isobutyl alcohol	(C ₄ H ₁₀ O)	108.0	26	91.1	-2.3
Sec. Butyl alcohol	(C ₄ H ₁₀ O)	99.5	38	88.4	-2.0 (20%)
Tert. Butyl alcohol	(C ₄ H ₁₀ O)	82.45	63	78.0	-

Heptane (C_7H_{16}) + tert. Butyl alcohol ($C_4H_{10}O$)

Smyth and Dornie, 1931

t	d					
	5.85	8.53	13.44	22.59	49.57	72.65
	mol%					
-50	0.7456	0.7470	-	-	-	-
-30	0.7293	0.7305	0.7336	0.7401	-	-
-10	0.7125	0.7139	0.7169	0.7234	0.7455	-
0	-	-	-	-	0.7370	0.7635
10	0.6954	0.6969	0.6997	0.7062	0.7279	0.7541
30	0.6781	0.6794	0.6820	0.6882	0.7096	0.7348
50	0.6599	0.6611	0.6635	0.6694	0.6903	0.7146
70	0.6417	0.6422	0.6441	0.6494	0.6694	0.6832

t	d	
	100 mol%	
30	0.7775	
50	0.7563	
70	0.7343	

t	ϵ						
	5.85	8.53	13.44	22.59	49.57	72.65	100
	mol%						
-50	2.056	2.067	-	-	-	-	-
-30	2.037	2.058	2.084	2.167	-	-	-
-10	2.018	2.037	2.076	2.168	3.316	-	-
0	-	-	-	-	3.117	7.33	-
10	2.004	2.027	2.069	2.178	3.026	6.21	-
30	1.991	2.016	2.072	2.197	2.958	4.91	10.92
50	1.972	2.007	2.066	2.204	2.920	4.28	8.49
70	1.934	1.981	1.945	2.193	2.889	3.99	6.89

Heptane (C_7H_{16}) + Amyl alcohol ($C_5H_{12}O$)

Phillips, 1950 (fig.)

dielectric relaxation

t	0	3.67	4.07	8.2
	mol%			
-60	0.002	0.006	0.012	0.018
-20	-	-	-	-
+20	0.002	0.003	0.007	0.015
40	-	-	-	0.013

t	11.8	15.5	19.2	25.5
	mol%			
-60	0.027	0.034	0.056	0.054
-20	0.024	0.030	0.042	0.064
+20	0.026	0.036	0.056	0.103
40	0.024	0.037	0.057	0.118
60	0.018	0.030	0.047	0.108

Lecat, 1949

Heptane (C_7H_{16}) (b.t.=98.4) + Amyl alcohols.2nd comp.

Az

Name	Formula	b.t.	%	b.t.	Dt mix.
Isobutyl- carbinol	($C_5H_{12}O$)	131.9	8	97.9	-0.8
2-Pentanol	"	119.8	15	96.0	-1.3
3-Pentanol	"	116.0	20	96.0	-1.5
Methyl isopropyl- carbinol	"	112.9	23	95.0	-1.5 (20%)
Amylen- hydrate	"	182.35	28	92.15	-2.1 (50%)

Heptane (C ₇ H ₁₆) + Octyl alcohol (C ₈ H ₁₈ O)				
Smyth and Stoops, 1929				
t	d			
	4.47	6.71	12.60	23.47
	mol%			
-30	0.7318	0.7364	0.7438	0.7591
-20	0.7236	0.7280	0.7358	0.7512
-10	0.7151	0.7194	0.7277	0.7432
0	0.7069	0.7109	0.7193	0.7351
10	0.6987	0.7023	0.7111	0.7272
20	0.6904	0.6940	0.7028	0.7192
30	0.6820	0.6853	0.6943	0.7113
40	0.6738	0.6766	0.6857	0.7031
50	0.6647	0.6679	0.6770	0.6945
60	0.6557	0.6591	0.6688	0.6858
t	d			
	43.74	73.60	100	
	mol%			
-30	0.7881	0.8278	-	
-20	0.7805	0.8201	-	
-10	0.7730	0.8131	0.8461	
0	0.7650	0.8058	0.8391	
10	0.7573	0.7985	0.8322	
20	0.7498	0.7912	0.8253	
30	0.7418	0.7838	0.8186	
40	0.7338	0.7763	0.8115	
50	0.7258	0.7690	0.8042	
60	0.7176	0.7615	0.7970	
t	ε			
	4.47	6.71	12.60	23.47
	mol%			
-30	2.046	2.070	2.162	2.489
-20	2.033	2.055	2.152	2.457
-10	2.021	2.049	2.141	2.426
0	2.010	2.039	2.131	2.393
+10	2.000	2.029	2.122	2.376
20	1.991	2.020	2.114	2.357
30	1.981	2.012	2.107	2.341
40	1.971	2.004	2.100	2.326
50	1.960	1.994	2.091	2.311
60	1.948	1.982	2.082	2.295
t	mol%			
	43.74	73.60	100	
-30	4.928	11.22	-	
-20	4.456	10.21	-	
-10	4.045	9.25	13.31	
0	3.770	8.36	12.26	
+10	3.554	7.52	11.26	
20	3.384	6.78	10.34	
30	3.233	6.14	9.45	
40	3.130	5.60	8.62	
50	3.030	5.14	7.84	
60	2.943	4.75	7.09	

Heptane (C ₇ H ₁₆) + Glycol (C ₂ H ₆ O ₂)					
Leibnitz, Konnecke and Niese, 1957					
t	d		σ interface		
	L ₁	L ₂	(L ₁ /L ₂)		
20	1.1117	0.6838	16.279		
40	.0983	.6678	16.174		
60	.0823	.6492	15.927		
Heptane (C ₇ H ₁₆) + Diglycol (C ₄ H ₁₀ O ₃)					
Leibnitz, Konnecke and Niese, 1957					
t	d		σ interface		
	L ₁	L ₂	(L ₁ /L ₂)		
20	1.1122	0.6848	10.126		
40	.0975	.6683	10.133		
60	.0817	.6509	9.961		
Lecat, 1949					
Heptane (C ₇ H ₁₆) (b.t.=98.4) + Alcohols.					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Allyl alcohol	(C ₃ H ₆ O)	96.85	37	84.35	-1.70 (40%)
Glycol	(C ₂ H ₆ O ₂)	Two liquid phases till 80° at least			
Methoxy-glycol	(C ₃ H ₈ O ₂)	124.5	23	92.5	-0.3 (50%)
Ethoxy-glycol	(C ₄ H ₁₀ O ₂)	135.3	14	96.5	-3.3 (50%)
Ethylen-chlorhydrin	(C ₂ H ₅ OC1)	128.6	23	92.7	-2.5 (50%)
1-Chloro-2-propanol	(C ₃ H ₇ OC1)	127.0	17	96.5	-
Ethylen-bromhydrin	(C ₂ H ₅ OBr)	150.2	-	97.5	-
Ethanol-amine	(C ₂ H ₇ ON)	170.8	-	98.0	-
Butanethiol	(C ₄ H ₁₀ S)	97.8	60	96.0	-

Heptane (C_7H_{16}) + 1-Butanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az				
mol%	wt%	b. t.	d^{20}_D	n^{20}_D
52.0	49.4	95.45	0.7507	1.4101 Az

Heptane (C_7H_{16}) + 2-Methyl-1-propanethiol
($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az				
mol%	wt%	b. t.	d^{20}_D	n^{20}_D
92.1	91.3	88.50	0.8197	1.4338 Az

2-Methyl hexane (C_7H_{16}) + Methyl alcohol
(CH_3O)

Lecat, 1949

%	b. t.
0	90.0
40	- Az
100	64.7

3-Methyl hexane (C_7H_{16}) + Methyl alcohol
(CH_3O)

Lecat, 1949

%	b. t.
0	91.8
40	- Az
100	64.7

Heptanes (C_7H_{16}) + Thiols

Denyer, Fidler and Lowry, 1949

Az

wt%	mol%	b. t.	d^{20}_D	n^{20}_D
2-Methylhexane + 1-Butanethiol ($C_4H_{10}S$)				
16.8	15.4	89.74	0.6989	1.3914
2-Methylhexane + 2-Butanethiol ($C_4H_{10}S$)				
74.2	72.1	84.30	0.7806	1.4189
3-Methylhexane + 1-Butanethiol ($C_4H_{10}S$)				
24.5	22.8	91.20	0.7948	1.3977
3-Methylhexane + 2-Butanethiol ($C_4H_{10}S$)				
82.4	80.8	84.70	0.7968	1.4258
3-Methylhexane + 2-Methyl-1-propanethiol ($C_4H_{10}S$)				
65.2	62.8	87.16	0.7720	1.4164
2,2-Dimethyl pentane + 1-Propanethiol (C_3H_8S)				
85.1	81.3	67.20	0.8026	1.4242
2,2-Dimethyl pentane + 2-Butanethiol ($C_4H_{10}S$)				
25.0	23.1	78.60	0.7033	1.3918
2,2-Dimethyl pentane + 2-Methyl-1-propanethiol				
11.3	10.3	79.12	0.6867	1.3864
2,3-Dimethyl pentane + 1-Butanethiol ($C_4H_{10}S$)				
16.5	15.1	89.53	0.7116	1.3973
2,3-Dimethyl pentane + 2-Butanethiol ($C_4H_{10}S$)				
70.8	68.6	84.16	0.7835	1.4204
2,3-Dimethyl pentane + 2-Methyl-1-propanethiol id.				
56.7	54.1	86.26	0.7616	1.4132
2,4-Dimethyl pentane + 1-Propanethiol (C_3H_8S)				
88.2	85.1	67.48	0.8119	1.4275
2,4-Dimethyl pentane + 2-Butanethiol ($C_4H_{10}S$)				
30.3	28.1	79.55	0.7099	1.3937
2,4-Dimethyl pentane + 2-Methyl-1-propanethiol				
15.4	14.1	80.28	0.69205	1.3878
2,2,3-Trimethyl butane + 1-Propanethiol (C_3H_8S)				
90.1	87.4	67.57	0.8177	1.4300
2,2,3-Trimethylbutane + 2-Methyl-1-propanethiol ($C_4H_{10}S$)				
17.9	16.4	80.60	0.7091	1.3956

Lecat, 1949

Octane (C_8H_{18}) (b.t.=125.75) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Methyl alcohol	(CH_4O)	64.65	72	63.0	-
Ethyl alcohol	(C_2H_6O)	78.3	76	76.3	-1.8 (78%)
Propyl alcohol	(C_3H_8O)	97.2	68	93.9	-1.7
Isopropyl alcohol	(C_3H_8O)	82.4	84	81.6	-1.4 (90%)

Octane (C_8H_{18}) + Methyl Alcohol (CH_4O)

Sieg, 1951

sat.t.	L_1	mol %	L_2
21	93		-
30	92		18
40	91		22
50	89		28
60	83		38
67		65	

Kogan, Deizenrot and al., 1956

L_1	%	L_2	sat.t.
2.79		85.67	2
2.20		84.25	10
4.9		80.60	25
7.13		74.88	45

Zieborak, Maczynska and Maczynski, 1956 (fig)

mol %	b.t.	mol %	b.t.
760 mm			
100	64.6	80	62.8
96	63.0	77-60	62.8 L_1+L_2
91	62.8 Az	0	125.6
Az : 63.0°		C.S.T. = 66.7°	

Octane (C_8H_{18}) + Isopropyl alcohol (C_3H_8O)

Kreglewski, 1955

wt%	mol%	C.V.T.
100	100	235.25
93.5	96.5	235.40
81.8	89.5	236.20
75.0	85.1	238.05
47.6	63.3	249.25
0	0	295.6

Ralston, Hoerr and Crews, 1944

f.t.	%
-75.0	6.6
-70.0	9.0
-65.0	13.7
-60.0	26.5
-56.84	100

Octane ($C_8H_{18}O$) + Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b.t.
0	125.75
50	110.2
100	117.8

Ralston, Hoerr and Crews, 1944

f.t.	%
-75.0	10.9
-70.0	13.3
-65.0	18.1
-60.0	31.1
-56.84	100

Octane (C ₈ H ₁₈) + Isobutyl alcohol (C ₄ H ₁₀ O)				Octane (C ₈ H ₁₈) (b.t. = 125.75) + Varia							
Lecat, 1949				Lecat, 1949							
		%	b.t.	Dt mix		2nd Comp.		Az			
Name		Formula		b.t.	%	b.t.	Dt mix				
Isobutyl carbinol		C ₇ H ₁₂ O		131.9	35	119.8	-1.7 (35%)				
2-Pentanol		C ₇ H ₁₂ O		119.8	50	114.8	-				
tert. Amyl alcohol		C ₇ H ₁₂ O		102.35	75	101.1	-				
Methoxy glycol		C ₃ H ₈ O ₂		124.5	48	110.0	-0.5 (50%)				
Ethoxy glycol		C ₄ H ₁₀ O ₂		135.3	38	116.0	-3.0 (50%)				
Propoxy glycol		C ₅ H ₁₂ O ₂		151.35	20	122.8	-				
Methyl lactate		C ₄ H ₈ O ₃		143.8	30	120.3	-				
Ethylchlorhydrine		C ₂ H ₅ OC1		128.6	47	112.5	-2.0				
Ethanolamine		C ₂ H ₇ ON		170.8	16	123.0	-				
Octane (C ₈ H ₁₈) + Benzyl alcohol (C ₇ H ₈ O)											
Mulliken and Wakeman, 1935											
C.S.T. : 50 vol% 55°											
Octane (C ₈ H ₁₈ O) + Isoamyl alcohol (C ₅ H ₁₂ O)											
Kreglewski, 1953											
		wt%	mol%	C.V.T.							
100		100	306.25								
83.9		87.1	298.75								
63.0		68.8	292.30								
44.9		51.4	290.05								
41.3		47.7	289.95								
32.5		38.4	289.85								
19.1		23.4	291.20								
18.2		22.4	291.40								
0		0	295.60								
min.:		41 wt%	289.85°								

Lecat, 1949						Isomeric octanes (C_8H_{18}) + Benzyl alcohol (C_7H_8O)					
Diisobutyl (C_6H_{14}) (b.t. = 109.4) + Alcohols						Maman, 1937					
2nd Comp.		Az				1st Comp.		C.S.T.			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.						
Methyl alcohol	CH_4O	64.65	60	61.0	-	Isooctane		59.9			
Ethyl alcohol	C_2H_6O	78.2	59	75.2	-2.8 (60%)	3-Methylheptane		55.9			
Propyl alcohol	C_3H_8O	97.2	47	89.5	-2.7 (50%)	4-Methylheptane		54.9			
Isopropyl alcohol	C_3H_8O	82.4	62	78.8	-1.7 (60%)	3-Ethylhexane		49.2			
Butyl alcohol	$C_4H_{10}O$	117.8	28	101.9	-	2,3-Dimethylhexane		51.4			
Isobutyl alcohol	$C_4H_{10}O$	108.0	42	98.2	-3.4 (50%)	2,4-Dimethylhexane		57.3			
sec. Butyl alcohol	$C_4H_{10}O$	99.5	54	93.0	-	2,5-Dimethylhexane		65.3			
tert. Butyl alcohol	$C_4H_{10}O$	82.45	78	80.7	-	3,4-Dimethylhexane		46.4			
Isobutyl carbinol	$C_5H_{12}O$	131.9	15	107.6	-2.0 (50%)	2-Methyl-3-ethylpentane		46.6			
Methylisopropyl alcohol	$C_5H_{12}O$	112.9	32	103.5	-	2,2,4-Trimethylpentane (C_8H_{18}) (b.t. = 99.3) + Alcohols					
tert. Amyl alcohol	$C_5H_{12}O$	102.35	50	97.0	-2.3 (50%)	Lecat, 1949					
Allyl alcohol	C_3H_6O	96.85	50	89.3	-	2nd Comp.		Az			
Methoxy glycol	$C_3H_8O_2$	124.5	33	100.0	-	Name	Formula	b.t.	%	b.t.	Dt mix
Ethoxy glycol	$C_4H_{10}O_2$	135.3	22.5	105.0	-	Methyl alcohol	CH_4O	64.65	53	59.4	-
Methyl lactate	$C_4H_8O_3$	143.8	17	108.5	-5.0 (17%)	Ethyl alcohol	C_2H_6O	78.3	53	72.4	-2.5 (60%)
Ethylenechlorhydrin	C_2H_5OC1	128.6	33	101.0	-4.1 (50%)	Propyl alcohol	C_3H_8O	97.2	41	85.3	-
1-Chlor-2-propanol	C_3H_7OC1	127.0	30	105.0	-	Isopropyl alcohol	C_3H_8O	82.4	54	76.8	-
2,2,4-Trimethylpentane (C_8H_{18}) + Methyl alcohol (CH_4O)						Isobutyl alcohol	$C_4H_{10}O$	108.0	27	92.0	-
Lecat, 1949						Isobutyl carbinol	$C_5H_{12}O$	131.9	5	99.0	-
%		b.t.				2,2,4-Trimethylpentane (C_8H_{18}) + Benzyl alcohol (C_7H_8O)					
0		99.3				Mulliken and Wakeman, 1935					
53		59.4 Az				50 vol% sat.t. = 74°					
100		64.65									

2,2,4-Trimethylpentane (C_8H_{18}) + Ethyl alcohol
(C_2H_6O)

Kretschmer, Nowakowska and Wiebe, 1948

mol%	p	
	0°	25°
0	13.04	49.31
1.86	19.95	78.83
14.70	22.30	92.81
29.67	22.61	95.32
37.95	22.68	95.83
56.84	22.65	96.05
77.49	22.18	94.41
90.77	19.94	86.31
94.58	17.99	79.64
98.82	13.81	65.28
100	11.95	59.02

mol%	p	
L	V	
	25°	
0	0	49.31
5.65	44.41	86.56
11.82	47.62	91.82
17.00	49.10	93.57
27.48	50.73	95.22
37.73	51.53	95.85
54.16	52.85	96.14
72.25	55.01	95.25
85.11	59.94	91.49
96.03	74.71	75.71
97.57	80.23	70.41
100	100	59.03

		50°
0	0	146.47
1.13	21.38	207.31
3.40	42.38	250.15
5.79	47.52	271.87
12.40	52.54	296.29
34.28	57.01	315.21
51.76	58.63	318.26
59.43	59.41	318.75
61.44	59.69	318.82
77.13	62.79	315.10
87.99	68.81	301.38
93.19	75.26	282.86
95.16	79.42	271.27
98.29	90.08	242.85
100	100	220.94

wt%	mol%	d
		25°
0	0	0.68777
1.30	3.16	.68834
1.63	3.94	.68857
4.31	10.05	.69041
4.99	11.52	.69088
14.32	29.30	.69823
29.60	51.04	.71140
46.80	68.56	.72735
63.13	80.93	.74358
80.57	91.14	.76227
89.62	95.54	.77261
100	100	.78506

wt%	mol%	d	
		0°	50°
0	0	0.70812	0.66686
5.44	12.48	0.71207	0.66959
11.20	23.82	0.71676	0.67378
23.32	42.99	0.72705	0.68368
32.32	54.21	0.73508	0.69158
41.66	63.90	0.74371	0.70018
53.07	73.71	0.75464	0.71119
53.97	74.40	0.75554	0.71212
64.09	81.57	0.76573	0.72243
69.68	85.07	0.77160	0.72831
80.42	91.06	0.78330	0.74009
91.95	96.59	0.79658	0.75342
93.32	97.19	0.79823	0.75503
100	100	0.80631	0.76314

Brown and Fock, 1955

mol%	Q mix	mol%	Q mix
			25.0°
11.7	212.0	78.3	130.0
23.3	240.0	86.9	84.8
42.5	233.0	95.0	27.0
70.3	164.9	95.0	27.0

2,2,4-Trimethylpentane (C_8H_{18}) + 2-Methyl-1-propanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d ²⁰	n _D ²⁰
91.9	90.0	88.41	0.8164	1.4325

Isooctanes (C_8H_{18}) + 1-Butanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

Name	mol%	wt%	b. t.	d ²⁰	n _D ²⁰
2,2-Dimethylhexane	82.5	78.8	98.01	0.8049	1.4298
2,5-Dimethylhexane	90.3	88.0	98.22	0.8204	1.4353
3,3-Dimethylhexane	98.1	97.6	98.56	0.8380	1.4414
2,2,4-Trimethylpentane	56.2	50.3	95.50	0.7568	1.4135

Nonane (C_9H_{20}) + Methyl Alcohol (CH_3O)

Zieborak, Maczynska and Maczynski, 1956 (fig)

mol %	b. t.	mol %	b. t.
760 mm			
100	64.6	87-50	64.5 L_1+L_2
93	64.3 Az	30	65.0
90	64.5	0	150.7
Az : 64.4°			

Kogan, Deizenrot and al., 1956

L_1	%	L_2	sat. t.
1.91		86.17	2
1.91		82.80	20
3.77		79.93	40
8.80		78.48	60

Decane ($C_{10}H_{22}$) + Methyl alcohol (CH_3O)

Zieborak, Maczynska and Maczynski, 1956 (fig.)

mol %	b. t.	mol %	b. t.
760 mm			
100	64.6	92-30	64.9 L_1+L_2
92	64.9		
Az : 64.93°			

sat. t.	L_1	mol %	L_2
36	96	-	-
50	95	-	-
60	93	-	-
70	92	-	-
80	90	-	-
88	83	62	-
90	78	78	-

C.S.T. = 91°

Bingham, 1907

C.S.T. = 76°

Decane ($C_{10}H_{22}$) + Ethyl alcohol (C_2H_5O)

Bingham, 1907

C.S.T. = -15°

Decane ($C_{10}H_{22}$) + Methoxyglycol ($C_3H_8O_2$)

Lecat, 1949

%	b. t.
0	173.3
92	123.5 Az
100	124.5

Diisoamyl ($C_{10}H_{22}$) + Methyl alcohol (CH_3O)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T. = 86.8° dt/dp (10-150Kg/cm²) = +0.04Diisoamyl ($C_{10}H_{22}$) + Benzyl alcohol (C_7H_8O)

Mulliken and Wakeman, 1935

50 vol% sat. t. = 72°

Diisoamyl ($C_{10}H_{22}$) (b.t. - 160.1) + Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	3	64.6	-
Butyl alcohol	$C_4H_{10}O$	117.8	96	117.6	-0.4 (96%)
Isobutyl carbinol	$C_5H_{12}O$	131.9	83	130.8	-1.3 (85%)
Hexyl alcohol	$C_6H_{14}O$	157.85	37	152.0	-
Glycol	$C_2H_6O_2$	197.4	21	153.0	-
Methoxy glycol	$C_3H_8O_2$	124.5	70	121.0	-
Ethoxy glycol	$C_4H_{10}O_2$	135.3	63	130.8	-2.2 (80%)
Propoxy glycol	$C_5H_{12}O_2$	151.35	52	143.7	-
Cyclo-hexanol	$C_6H_{12}O$	160.8	42	152.8	-
Methylcyclo-hexanol	$C_7H_{14}O$	168.5	27	155.8	-
Methyl lactate	$C_4H_8O_3$	143.8	68	137.8	-8.5 (50%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	58	145.5	-5.0 (60%)
Ethylenchlorhydrine	C_2H_5OCl	128.6	68	123.5	-
Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	40	154.5	-

Undecane ($C_{11}H_{24}$) + Methyl Alcohol (CH_4O)

Zieborak, Maczynska and Maczynski, 1956 (fig)

mol %	b.t.	mol %	b.t.
760 mm			
100	64.6	36	65.2
94	65.0	30	66.0
94-44	65.0		
Az : 65.05°			

Dodecane ($C_{12}H_{26}$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Crews, 1944

%	f.t.
99.9	-50.0
99.3	-40.0
97.4	-30.0
91.7	-20.0
82.6	-15.0
0	-9.64

Dodecane ($C_{12}H_{26}$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Crews, 1944

%	f.t.
99.5	-60.0
99.0	-50.0
98.0	-40.0
95.6	-30.0
98.0	-20.0
76.1	-15.0
0	-9.64

Dodecane ($C_{12}H_{26}$) + Propyleneglycol ($C_3H_8O_2$)

Lecat, 1949

%	b.t.
0	216
67	175 Az
100	188.5

Tridecane ($C_{13}H_{28}$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.
0	234.0
55	188.0 Az
100	290.5

Tetradecane ($C_{14}H_{30}$) + Propyleneglycol
($C_3H_8O_2$)

Lecat, 1949

%	b. t.
0	252
76	179 Az
100	188.5

Hexadecane ($C_{16}H_{34}$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Crews, 1944

f. t.	%
-20.0	99.9
-10.0	99.6
0.0	98.3
+10.0	93.0
15.0	82.5
18.18	0

Hexadecane ($C_{16}H_{34}$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Crews, 1944

f. t.	%
-20.0	99.7
-10.0	98.8
0.0	96.1
+10.0	85.7
15.0	66.7
18.18	0

Diisooctyl ($C_{16}H_{34}$) + Ethyl alcohol (C_2H_6O)

Zenailova-Mikhailova, 1937

C.S.T. : 40 vol% : 38.72°

Heptadecane ($C_{17}H_{36}$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Crews, 1944

f. t.	%
-10.0	99.9
0.0	99.2
+10.0	95.2
15.0	89.5
21.72	0

Heptadecane ($C_{17}H_{36}$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Crews, 1944

f. t.	%
-10.0	99.6
0.0	97.4
+10.0	88.5
15.0	73.7
21.72	0

Dotriacontane ($C_{32}H_{66}$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Crews, 1944

f. t.	%
50.0	99.8
60.0	97.8
70.1	89.1
70.16	0

C.S.T. : 80.4% 82.3°

Dotriacontane ($C_{32}H_{66}$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Crews, 1944

f. t.	%
50.0	99.1
60.0	91.6
70.16	0

Paraffin oil + Ethyl alcohol (C_2H_6O)

Howard and Patterson, 1926

C.S.T. 13% 33.5°

Vaselin oil + Propyl alcohol (n and iso.) (C_3H_8O)

Zenalova-Mikhailova, 1937

C.S.T. 50 vol% 35.2°

Amylene (C_5H_{10}) + Ethyl alcohol (C_2H_6O)

Guthrie, 1875

%	p	%	p
18.4°			
100	41.9	40	330.0
90	124.1	30	334.5
80	227.4	20	334.8
70	277.3	10	338.1
60	309.0	0	356.5
50	323.7		

2-Pentene (C_5H_{10}) + Methyl alcohol (CH_3O)

Lecat, 1949

%	b. t.
0	36.7
12	31.5 Az
100	64.7

Lecat, 1949

Trimethylethylene (C_5H_{10}) (b. t.=37.1) + Alcohols

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Methyl alcohol	(CH_4O)	64.65	7.5	31.7	-1.4 (21%)
Ethyl alcohol	(C_2H_6O)	78.3	-	35.5	-0.8 (4%)
Ethane-thiol	(C_2H_6S)	35.8	60	33.0	-1.2 (50%)

Isopropylethylene (C_5H_{10}) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	20.6	
3	18.0 Az	-0.3
100	64.65	

Isopropylethylene (C_5H_{10}) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	20.6	
2	20.0 Az	
50	-	-2.8
100	78.3	

Hexene (C_6H_{12}) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.
0	68.5
26	50 Az
100	64.7

1-Heptene (C_7H_{14}) + Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	95
13	90 Az
100	117.8

6-Methyl-1-heptene (C_8H_{16}) + Isobutyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	95
18.7	109 Az
100	151.9

1,3-Pentadiene (C_5H_8) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.
0	44.2
17	37.5 Az
100	64.7

Isoprene (C_5H_8) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	34.3	
5	29.5 Az	
50	-	-3.2
100	64.65	

Lecat, 1949

Diallyl (C_6H_{10}) (b.t.=60.1) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Methyl alcohol	(CH_4O)	64.65	22.5	47.05	-2.5 (22%)
Ethyl alcohol	(C_2H_6O)	78.3	13	53.5	-1.9 (15%)
Isopropyl alcohol	(C_3H_8O)	82.4	10	56.2	-1.5 (11%)

Isoprene (C_5H_8) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	34.3	
3	32.65 Az	-0.7
100	78.3	

Dimethylallene as. (C_5H_8) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	40.8	
8	34.5 Az	-1.1
8.5	34.5	
100	64.65	

Dimethylallene as. (C_5H_8) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b. t.
0	40.8
6	38.2 Az
100	78.3

Cyclopentane (C_5H_{10}) (b.t. = 49.4) + Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	14	38.8	-2.3 (15%)
Ethyl alcohol	C_2H_6O	78.3	7.5	44.7	-
Isopropyl alcohol	C_3H_8O	82.4	-	47.3	-
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	7	48.2	-

Cyclopentane (C_5H_{10}) + Ethanethiol (C_2H_6S)

Denyer, Fidler and Lowry, 1949

Az

mol%	w.t.	b.t.	d^{20}	n_D^{20}
90	89	34.95	0.8283	1.42745

Cyclopentane (C_5H_{10}) + 2-Propanethiol (C_3H_8S)

Denyer, Fidler and Lowry, 1949

mol%			mol%		
V	L	b.t.	V	L	b.t.
760 mm					
0	0	49.35	37.2	38.3	48.02
6.0	6.0	48.94	46.0	48.6	48.15
27.0	26.3	48.05	66.0	73.4	49.48
32.4	31.8	47.94	100	100	52.60

mol%	n_D^{20}
15.33	1.40785
27.96	1.4097
43.58	1.4124
57.82	1.4153
71.94	1.4186
85.74	1.4219

Az

mol%	wt%	b.t.	d^{20}	n_D^{20}
33.4	35.3	47.75	0.7655	1.4109

Methylcyclopentane (C_6H_{12}) (b.t. = 72.0) + Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	32	51.3	-3.3 (30%)
Ethyl alcohol	C_2H_6O	78.2	25	60.3	-2.4 (50%)
Propyl alcohol	C_3H_8O	92.2	7	68.5	-2.3 (10%)
Isopropyl alcohol	C_3H_8O	82.4	25	63.3	-
Butyl alcohol	$C_4H_{10}O$	117.8	-	71.8	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	2.5	68.1	-2.35 (46%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	11.5	69.7	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	26	66.6	-
tert. amyl alcohol	$C_5H_{12}O$	102.35	5	71.5	-
Allyl alcohol	C_3H_6O	96.85	10	67.8	-
Propane-thiol	C_3H_8S	67.3	95.3	66.2	-
Ethylene-chlorhydrin	C_2H_5OCl	128.6	-	71.4	-

Methylcyclopentane (C_6H_{12}) + 1-Propanethiol
(C_3H_7S)

Denyer, Fidler and Lowry, 1949

mol%		b.t.	mol%		b.t.
V	L		V	L	
760 mm					
0	0	71.85	56.4	54.5	66.24
16.5	11.0	69.74	62.8	61.8	66.21
30.2	23.6	68.02	67.3	68.0	66.20
34.0	28.4	67.65	67.9	68.6	66.20
39.0	33.0	67.30	69.4	70.5	66.19
43.0	38.3	66.85	80.0	82.6	66.34
45.8	41.2	66.76	87.3	89.3	66.76
48.5	44.5	66.60	100	100	67.82
52.0	48.5	66.37			

mol%	d^{20}_D
20.44	1.4129
33.46	1.4157
47.21	1.4193
61.54	1.4233
75.38	1.42805

Az

mol%	wt%	b.t.	d^{20}	n^{20}_D
66.0	64.2	64.45	0.8015	1.4246

Methylcyclopentane (C_6H_{12}) + 2-Methyl-2-propanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az.

mol%	wt%	b.t.	d^{20}	n^{20}_D
95.0	95.3	64.37	0.7967	1.4209

Ethylcyclopentane (C_7H_{14}) + 1-Butanethiol
($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b.t.	d^{20}	n^{20}_D
73.8	72.15	97.76	0.8172	1.4345

Dimethylcyclopentanes (C_7H_{14}) + Butanethiols,
($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Formula	mol%	wt%	Az	d^{20}	n^{20}_D
1,1 A	66.0	64.1	83.90	0.7976	1.4258
1,1 B	46.4	44.25	85.69	0.7849	1.4221
1,2 C	50.1	48.0	96.35	0.8048	1.4306
1,2 B	98.7	98.6	88.52	0.8328	1.4383
1,3 C	13.5	12.7	90.54	0.7555	1.4121
1,3 A	79.5	78.1	84.75	0.8081	1.4290
1,3 B	60.7	58.6	87.02	0.7930	1.4239

A= 2-Butanethiol

B= 2-Methyl-1-propanethiol

C= 1-Butanethiol

Cyclopentene (C_5H_8) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.
0	44.5
18	37 Az
100	64.7

Methylcyclopentene (C_6H_{10}) (b.t. = 75.85) +
Alcohols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Methyl alcohol	CH_4O	64.65	35	53.0
Ethyl alcohol	C_2H_6O	78.3	28	63.3
Propyl alcohol	C_3H_8O	97.2	13	71.7
tert. Butyl alcohol	$C_4H_{10}O$	82.45	39	69.5

Cyclohexane (C_6H_{12}) + Methyl alcohol (CH_3O)

Lecat, 1949

%	b. t.
0	80.75
38.2	54.2 Az
100	64.65

Lecat, 1909

%	sat. t.	%	sat. t.
69	16	29	49.1
61.7	29	22.4	48.2
56	33.1	18.7	47
49.4	39.9	16.5	45.2
41.1	45.7	13.7	44
37.3	47.2	9	38.5
33	48.1	4.1	21.8

Eckfeldt and Lucasse, 1943

%	sat. t.	%	sat. t.
61.06	29.19	26.14	45.14
60.05	30.46	21.17	44.81
46.06	42.29	24.07	45.09
52.12	38.62	18.16	44.15
57.09	34.01	14.01	42.05
40.23	44.24	11.02	39.05
36.15	44.87	9.08	35.95
33.18	45.07	8.19	34.13
30.09	45.14	7.88	33.19
28.12	45.14	6.11	31.3

Timmermans, 1922

P	C. S. T.	dt/dp
50	59.45	-
100	61.02	+0.0314
200	63.98	.296
400	69.10	.256
700	75.25	.205
100	81.0	.191

Authors

C. S. T.

Timmermans and Kohnstamm, 1909-10		59.0°
dt/dp (5-120Kg/cm ²) = +0.03		
Freed	1933	45.5°
Francis	1944	45°
Wood	1946	45.14°
Quantie	1954	49.2 (40.4%)

Jones and Amstell, 1930

%	sat. t.	%	sat. t.
67.77	17.1	27.19	45.58
60.60	30.40	22.40	45.53
51.04	40.05	20.74	45.45
46.40	42.68	19.36	45.32
40.51	44.62	18.75	45.10
33.82	45.45	13.07	42.80
30.85	45.52	8.53	37.5
30.14	45.56	6.60	32.3
29.20	45.58	4.50	30.6
28.00	45.60 C. S. T.	2.70	6.1

Harms, 1938 - 1943

mol%	d	30°
0.00	0.79146	0.76903
0.937	0.79124	0.76870
2.608	0.79100	0.76858
3.618	0.79089	0.76823
5.265	0.79076	0.76801
7.279	0.79070	0.76779
9.152	0.79067	0.76759
10.695	0.79068	0.76748
81.052	-	0.76901
84.044	0.79403	0.76993
84.454	0.79413	0.77014
86.750	0.79428	0.77101
89.636	0.79528	0.77251
95.770	0.79982	0.77716
97.073	0.80106	0.77845
98.823	0.80295	0.78037
100.00	0.80436	0.78181

mol%	d	30°	ε
0.000	0.76903	2.004	
1.470	0.76860	2.031 ₀	
3.032	0.76834	2.057 ₄	
5.027	0.76808	2.099 ₃	
6.475	0.76789	2.137 ₆	
7.991	0.76773	2.187 ₀	
10.020	0.76754	2.264 ₅	
81.052	0.76901	18.41	
84.044	0.76993	20.71	
86.750	0.77101	22.36	
89.636	0.77251	24.48	
92.466	0.77432	27.14	
95.574	0.77687	29.81	
100.000	0.78182	30.9	

Cyclohexane (C ₆ H ₁₂) + Ethyl alcohol (C ₂ H ₆ O)		
Nagai and Isii, 1935		
mol%	d	ε
40°		
0	0.75944	1.989
1.529	0.75886	2.014
3.391	0.75851	2.044
5.398	0.75819	2.090
6.162	0.75812	2.108
10.843	0.75762	2.266
16.178	0.75722	2.528
74.800	0.75790	15.73
89.825	0.76292	23.9
100	0.77230	30.6
mol%	d	ε
46°		
0	0.75375	1.979
1.652	0.75316	2.005
4.114	0.75260	2.041
6.660	0.75227	2.109
13.055	0.75159	2.346
22.100	0.75095	2.900
42.393	0.75049	3.955
42.393	0.75041	3.318
53.113	0.75048	7.478
62.200	0.75073	10.18
72.067	0.75160	14.41
85.837	0.75510	21.29
93.187	0.75965	26.87
100	0.76654	-

Leibnitz, Konnecke and Niese, 1957				
t	d		σ interface	
	L ₁	L ₂	(L ₁ /L ₂)	
20	0.7800	0.772	0.682	
30	.7690	.7671	.340	
35	.7635	.7621	.223	
40	.7579	.7569	.107	

Cyclohexane (C ₆ H ₁₂) + Ethyl alcohol (C ₂ H ₆ O)				
mol%	p			
	0°	10°	20°	30°
100	12.30	23.90	44.55	77.45
95	21.85	40.15	70.95	116.9
90	27.70	50.65	85.75	139.5
85	31.30	55.70	94.25	153.5
80	33.45	58.60	99.85	162.4
75	34.80	60.45	103.4	167.9
70	35.70	61.80	105.7	171.2
65	36.25	62.70	107.2	174.0
60	36.50	63.30	108.1	175.7
55	36.55	63.75	108.7	177.0
50	36.60	64.15	109.0	178.0
45	36.65	64.50	109.2	178.6
40	36.70	64.75	109.4	178.9
35	36.70	64.95	109.5	179.1
30	36.70	66.10	109.6	178.9
25	-	65.10	109.7	178.6
20	-	65.00	109.6	178.0
15	-	64.05	109.3	176.9
10	-	63.70	107.9	175.0
5	-	61.65	104.5	169.7
0	-	47.00	77.25	121.8
mol%	p ₂			
	0°	10°	20°	30°
100	12.30	23.50	44.75	77.45
95	11.90	22.55	42.45	73.95
90	11.40	21.75	40.75	71.40
85	11.10	21.20	39.55	69.25
80	10.85	20.70	38.65	67.55
75	10.60	20.45	37.95	66.25
70	10.35	20.15	37.15	64.85
65	10.20	19.80	36.65	63.85
60	10.10	19.55	36.25	62.65
55	9.95	19.45	35.95	61.65
50	9.90	19.35	35.65	60.85
45	9.90	19.30	"	60.15
40	9.90	19.25	"	59.85
35	-	"	"	59.75
30	-	"	"	59.25
25	-	"	35.55	58.85
20	-	19.10	35.35	58.25
15	-	18.75	34.85	57.05
10	-	17.70	33.05	55.05
5	-	15.40	28.75	49.45
mol%	p ₁			
	0°	10°	20°	30°
95	9.95	17.60	28.50	42.9
90	16.30	28.90	45.00	68.1
85	20.20	34.50	54.70	84.2
80	22.60	37.90	61.2	94.8
75	24.20	40.00	65.4	101.6
70	25.35	41.63	68.6	106.3
65	26.05	42.90	70.5	110.1
60	26.40	43.75	71.8	112.9
55	26.60	44.30	72.7	115.3
50	26.70	44.80	73.3	117.1
45	26.75	45.20	73.5	118.2
40	26.80	45.50	73.7	119.0
35	-	45.70	73.8	119.3
30	-	45.80	73.9	119.6
25	-	45.85	74.1	119.7
20	-	45.90	74.2	"
15	-	"	74.4	119.8
10	-	46.00	74.8	119.9
5	-	46.25	75.3	120.1
0	-	47.00	77.25	121.74

Washburn and Handorf, 1935

mol%		P ₂	P ₁
L	V		
25°			
100	100	57.3	-
89.92	47.96	52.0	56.4
79.48	36.96	46.4	79.2
70.98	35.32	46.8	85.8
59.41	35.10	48.4	89.5
49.83	34.24	47.7	91.7
40.16	33.68	46.8	92.6
29.87	33.13	46.1	93.0
20.50	32.68	45.9	94.6
10.30	31.15	42.5	94.3
0	0	-	97.3

Dolique, 1935

Az : 30.50% 64.7°

Lecat, 1949

%	b.t.	Dt mix
0	80.75	
31.5	64.9 Az	-5.5
100	78.3	

Harms, 1943

mol%		d		mol%		d	
		6°	30°			6°	30°
0	0.79133	0.76881	63.822	0.79109	0.76917		
2.907	0.79080	0.76805	74.134	0.79250	0.77094		
6.328	0.79046	0.76765	85.865	0.79324	0.77417		
8.389	0.79032	0.76749	91.803	0.79735	0.77646		
17.505	0.78985	0.76701	94.909	0.79868	0.77792		
22.722	0.78975	0.76689	97.901	0.80015	0.77951		
36.031	0.78972	0.76708	98.606	0.80052	0.77992		
43.665	0.78988	0.76736	99.305	0.80093	0.78036		
48.551	0.79003	0.76764	100.000	0.80133	0.78078		
56.526	0.79047	0.76830					

Trieschmann, 1935

mol%	σ
22°	
100	21.9 ₆
74.39	22.3 ₃
53.81	22.6 ₇
41.22	22.9 ₂
19.21	23.6 ₅
0	24.6 ₅

Washburn and Handorf, 1935

mol%	n _D	
	L	V
25°		
100	1.35935	-
89.92	1.36867	1.39916
79.48	1.37766	1.40524
70.89	1.38412	1.40611
59.41	1.39216	1.40623
49.83	1.39836	1.40666
40.16	1.40342	1.40695
29.87	1.40890	1.40723
20.50	1.41356	1.40748
10.30	1.41855	1.40830
0	1.42338	-

Harms, 1938

mol%	ϵ	
	6°	30°
0	2.040 ₉	2.003
2.907	2.086 ₅	2.054 ₄
6.328	2.158 ₂	2.117 ₅
8.389	2.225 ₆	2.184 ₆
17.505	2.772 ₆	2.620 ₂
22.722	3.306 ₆	3.037 ₇
29.277	4.227 ₁	3.755 ₆
36.031	5.483 ₆	4.746 ₆
43.665	-	6.178
48.551	8.631	7.295
56.526	10.953	9.572
63.822	13.33	11.54
74.134	16.99	14.92
100.000	28.0	24.4

Cyclohexane (C_6H_{12}) + Propyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	80.75	
20	74.3	Az
100	97.2	-3.5

Harms, 1943

mol%	d
	22°
0	0.77646
19.126	0.77747
36.201	0.78034
51.575	0.78385
65.281	0.78767
77.621	0.79190
89.073	0.79641
100.000	0.80200

Cyclohexane (C_6H_{12}) + Isopropyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.
0	80.75
33	68.6
100	82.4

Storonkin and Morachevskii, 1956

mol%	p	b. t.
L	V	
20.0	28.0	273.3
	31.0	412.0
	33.3	604.4
	34.2	782.3
40.0	32.0	261.0
	35.3	422.0
	37.8	587.0
	39.5	782.0
60.0	35.3	232.5
	39.9	405.5
	42.7	575.6
	44.9	782.1
80.0	46.4	221.3
	52.2	403.5
54.8	565.5	65.02
57.2	781.7	73.43
100.0	100.0	760.0

Joffe and Marchevskii, 1955

mol%	n_D	mol%	n_D
	20°		
0	1.4263	40.40	1.4077
10.66	1.4210	41.56	1.4070
17.04	1.4181	46.04	1.4050
20.00	1.4168	50.00	1.4029
28.34	1.4130	60.00	1.3983
32.03	1.4113	80.00	1.3882
37.14	1.4090	100	1.3773

Cyclohexane (C_6H_{12}) + Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	80.75
4	79.8
100	117.8

Smyth and Stoops, 1929

t	d	mol%	d
0	3.91	11.02	20.02
10	0.7877	0.7878	0.7889
20	0.7784	0.7783	0.7795
30	0.7690	0.7690	0.7701
40	0.7594	0.7593	0.7605
50	0.7498	0.7494	0.7508
60	0.7398	0.7387	0.7407
70	0.7299	0.7282	0.7308

Harms, 1943

mol%	d	mol%	d
	22°		
0	0.77643	24.743	0.78056
2.456	0.77641	32.284	0.78249
4.176	0.77662	43.277	0.78569
7.069	0.77707	60.141	0.79134
9.327	0.77740	80.238	0.79907
12.780	0.77801	89.706	0.80323
14.861	0.77838	100.000	0.80801

Trieschmann, 1935

mol%	σ
22°	
100	24.3 ₁
40.42	24.0 ₈
37.81	24.0 ₆
16.64	24.4 ₈
10.03	24.5 ₃
0	24.6 ₅

Smyth and Stoops, 1929

t	ϵ			
0	3.91	11.02	20.02	
mol%				
10	2.041	2.108	2.272	2.743
20	2.027	2.099	2.260	2.674
30	2.013	2.088	2.248	2.623
40	1.998	2.076	2.236	2.579
50	1.981	2.061	2.224	2.537
60	1.963	2.045	2.210	2.497
70	1.944	2.028	2.192	2.458

Cyclohexane (C_6H_{12}) (b.t. = 80.75) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Isobutyl alcohol	$C_4H_{10}O$	108.0	14	78.15	-1.2 (14%)
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	18	76.5	-3.2 (18%)
tert. Butyl alcohol	$C_4H_{10}O$	82.45	37	71.45	-
Amylene-hydrate	$C_5H_{12}O$	102.35	16	78.8	-

Cyclohexane (C_6H_{12}) + Octyl alcohol ($C_8H_{18}O$)

Harms, 1943

mol%	d
22°	
0	0.77643
4.586	0.77843
13.338	0.78325
18.957	0.78642
27.294	0.79078
38.838	0.79682
59.402	0.80682
84.060	0.81772
100.000	0.82479

Cyclohexane (C_6H_{12}) + 2-Ethylhexyl alcohol
($C_8H_{18}O$)

Harms, 1943

mol%	d
22°	
0	0.77643
4.025	0.77869
7.867	0.78093
13.811	0.78496
14.216	0.78521
23.688	0.79113
38.890	0.80030
58.851	0.81153
79.309	0.82267
100.000	0.83242

Cyclohexane (C_6H_{12}) + Dibutyl carbinol ($C_8H_{20}O$)

Joffe, 1952

%	n_D	d
20°		
0	1.42608	0.7781
17.54	1.42533	0.7835
41.78	1.42558	0.7936
52.46	1.42593	0.7983
72.89	1.42689	0.8085
100	1.42892	0.8234

Cyclohexane (C_6H_{12}) + Decylalcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
-10.8	29.3 E
+6.88	100

Cyclohexane (C_6H_{12}) + Dodecyl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
-0.9	15.8 E
+10.0	55.6
20.0	92.8
23.95	100

Cyclohexane (C_6H_{12}) + Tetradecyl alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
4.8	5.6 E
10.0	11.8
20.0	41.9
30.0	77.8
38.26	100

Cyclohexane (C_6H_{12}) + Cetyl alcohol ($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
6.0	1.4 E
10.0	2.2
20.0	9.9
30.0	39.8
40.0	74.0
49.62	100

Cyclohexane (C_6H_{12}) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
6.5	0.4 E
10.0	0.6
20.0	3.1
30.0	15.3
40.0	47.9
50.0	80.0
57.98	100

Cyclohexane (C_6H_{12}) + Glycol ($C_2H_6O_2$)

Leibnitz, Konnecke and Niese, 1957

t	d	σ interface
	L_1	L_2 (L_1/L_2)
20	1.1101	0.7786 14.448
40	.0957	.7599 14.247
60	.0785	.7398 13.853

Cyclohexane (C_6H_{12}) + Diglycol ($C_4H_{10}O_3$)

Leibnitz, Konnecke and Niese, 1957

t	d	σ interface
	L_1	L_2 (L_1/L_2)
20	1.1062	0.7786 8.345
40	.0906	.7399 8.098
60	.0743	.7419 7.746

Cyclohexane (C_6H_{12}) (b.t. = 80.75) + Alcohols

Lecat, 1949

2nd Comp.				Az	
Name	Formula	b.t.	%	b.t.	Dt mix
Allyl alcohol	C_3H_6O	96.85	20	74.1	-3.5 (20%)
Methoxy-glycol	$C_5H_8O_2$	124.5	8	79.8	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	10	78.5	-2

Cyclohexane (C_6H_{12}) + Furfural alcohol ($C_5H_6O_2$)

Francis, 1944

C.S.T. = 78

Cyclohexane (C_6H_{12}) + Ethylene chlorohydrin
(C_2H_5OCl)

Francis, 1944

C.S.T. = 81

Cyclohexane (C_6H_{12}) + Tetrahydro furfuryl alcohol
($C_5H_{10}O_2$)

Francis, 1944

C.S.T. = 39°

Cyclohexane (C_6H_{12}) + Cyclohexanol ($C_6H_{12}O$)

Hoerr and Harwood, 1956.

f.t. polymorphic forms.

Rastogi and Varma, 1956.

mol%	Dv. (cc/mole)	mol%	Dv. (cc/mole)
0	0	60	0.0
10	+0.45	70	-0.2
20	+0.6	80	-0.3
30	+0.59	90	-0.27
40	+0.45	100	0
50	+0.21		

Wulf and Takashima, 1938

mol%	d	ϵ	η
18° - 20°			
0	0.778	2.05	890
10	-	2.28	1100
20	-	2.64	1800
30	0.830	3.40	2400
50	0.866	6.37	5900
60	0.884	7.66	10100
70	0.902	-	17800
85	0.926	10.35	37900
100	0.941	13.40	59600

Cyclohexane (C_6H_{12}) + Benzyl alcohol (C_7H_8O)

Hückel, Niesel and Buchs, 1944

t	σ	
	75 mol%	83 mol%
at room temperature		
15	31.63	32.64
20	30.36	31.43
25	29.55	31.03
30	28.95	30.91
35	28.34	30.96
40	27.67	30.85
45	27.40	30.56
50	27.54	30.42
60	28.21	30.42

Cyclohexane (C_6H_{12}) + 1-Propanethiol (C_3H_8S)

Denyer, Fidler and Lowry, 1949

mol%		
V	L	b. t.
760 mm		
0	0	80.85
56.5	43.0	-
72.3	67.0	-
90.7	89.0	-
91.9	91.7	-
93.5	93.5	-
96.2	96.7	-
97.8	98.0	-
100	100	67.82

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
97.8	97.6	67.77	0.8395	1.4374

mol%	n_D	mol%	n_D
20°			
0	1.4262	47.06	1.4279
5.5	1.4261	63.16	1.4302
14.81	1.4259	75.02	1.4323
16.56	1.4260	87.57	1.4350
32.10	1.4264	100	1.4380

Cyclohexane (C_6H_{12}) + 2-Butanethiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
24.2	25.5	79.97	0.7879	1.4263

Cyclohexane (C_6H_{12}) + 2-Methyl-1-propanethiol
($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
11.0	11.7	80.70	0.7832	1.4263

Methylcyclohexane (C_7H_{14}) + Methyl alcohol
(CH_3O)

Lecat, 1949

%	b. t.	Sat. t.
0	101.15	
57	59.45	Az
100	64.65	45.7

Francis, 1944

C.S.T. = 47

Methylcyclohexane (C_7H_{14}) + Ethyl alcohol (C_2H_6O)

Kretschmer and Wiebe, 1949

L	V	p
35°		
0	0	73.62
5.26	46.45	135.40
14.46	51.18	146.97
28.78	53.62	151.27
40.52	54.71	152.36
54.03	55.75	152.93
69.14	58.17	152.22
84.50	64.23	145.73
96.76	83.69	120.04
100.00	100.00	103.14

55°

0	0	168.10
5.28	48.35	319.83
12.51	53.75	352.80
22.05	56.45	368.00
36.21	58.46	376.34
50.71	59.88	379.83
68.32	62.44	380.06
77.92	65.28	375.78
93.47	78.79	337.52
100.00	100.00	279.89

Lecat, 1949

%	b. t.	Dt mix
0	101.15	
51.5	72.95	Az
54	-	-2.3
100	78.3	

Kretschmer and Wiebe, 1949

mol%	n_{5461}^{25}	d^{25}	$D_v \cdot 10^5$ (cc/g)
0	1.42240	0.76496	0
6.72	1.41987	0.76457	176
17.09	1.41605	0.76484	316
28.66	1.41133	0.76562	418
51.96	1.40002	0.76836	547
71.25	1.38755	0.77226	562
73.37	1.38600	0.77284	553
73.56	1.38587	0.77288	554
80.60	1.38021	0.77508	504
89.61	1.37195	0.77877	364
92.45	1.36904	0.78024	290
100.00	1.36073	0.78505	0

Brown, Fock and Smith, 1956

mol %	Q mix	mol %	Q mix
35.00°			
12.9	137.19	71.9	123.08
24.7	163.71	71.9	120.93
42.6	166.10	72.3	112.33
65.7	132.16	88.8	65.96
66.5	126.43	89.2	61.42
71.2	114.24		

Methylcyclohexane (C_7H_{14}) + 2-Methyl-1-propane-
thiol ($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
99.0	98.9	88.55	0.8335	1.4384

Methylcyclohexane (C_7H_{14}) + 1-Butanethiol
($C_4H_{10}S$)

Denyer, Fidler and Lowry, 1949

Az

mol%	wt%	b. t.	d^{20}	n_D^{20}
60.3	58.2	97.00	0.8083	1.4327

Methylcyclohexane (C_7H_{14}) (b. t. = 101.15) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	41.5	86.0	-1.3 (50%)
Isopropyl alcohol	C_3H_8O	82.4	47.5	77.4	-
Butyl alcohol	$C_4H_{10}O$	117.8	21	96.4	-2.9 (50%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	30	93.2	-3.1 (50%)
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	42	90.8	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	65	78.0	-
Amyl alcohol	$C_5H_{12}O$	138.2	-	101.0	-
Isobutyl carbinol	$C_5H_{12}O$	131.9	8	97.9	-1.2 (10%)
2-Pentanol	$C_5H_{12}O$	119.8	18	98.6	-
3-Pentanol	$C_5H_{12}O$	116.0	22	97.8	-
Methyliso-propyl carbinol	$C_5H_{12}O$	112.9	25	97.8	-1.5 (25%)
Anylene hydrate	$C_5H_{12}O$	102.35	35	93.5	-1.9 (50%)
Allyl alcohol	C_3H_6O	96.85	42	85.8	-
Methoxy glycol	$C_3H_8O_2$	124.5	25	94.8	-
Ethoxy glycol	$C_4H_{10}O_2$	135.9	13	98.8	-
Ethylen-chlorhydrin	C_2H_5OCl	128.6	25	95.8	-2.2 (70%)

Methylcyclohexane (C_7H_{14}) + Alcohols.

Francis, 1944

2nd comp.	C.S.T.
Tetrahydrofurfuryl alcohol	($C_5H_{10}O_2$) 50
Furfuryl alcohol	($C_5H_6O_2$) 93
Ethylene chlorhydrin	(C_2H_5OCl) 89

1,3-Dimethylcyclohexane (C_8H_{16}) (b.t.=120.7)
+ Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	-	62.5	-1.8 (90%)
Ethyl alcohol	C_2H_6O	78.35	70	75.8	-
Propyl alcohol	C_3H_8O	97.2	63	93.0	-
Isopropyl alcohol	C_3H_8O	82.4	78	81.0	-
Butyl alcohol	$C_4H_{10}O$	117.8	43	108.5	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	56	102.2	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	90	82.2	-
Amyl alcohol	$C_5H_{12}O$	138.2	20	118.2	-
Isobutyl carbinol	$C_5H_{12}O$	131.9	27	116.6	-
2-Pentanol	$C_5H_{12}O$	119.8	39°	113.0	-
Amylen hydrate	$C_5H_{12}O$	102.35	68	100.1	-
Cyclopentanol	$C_5H_{10}O$	140.85	15	119.0	-
Ethoxyglycol	$C_4H_{10}O_2$	135.3	30	114.0	-
Propoxyglycol	$C_5H_{12}O_2$	151.35	15	119.0	-
Ethylen-chlorhydrin	C_2H_5OC1	128.6	42	109.5	-
Ethylen-bromhydrin	C_2H_5OBr	130.2	-	117.0	-
2-Chlor-1-propanol	C_3H_7OC1	133.7	35	115.0	-

sec. Butylcyclohexane ($C_{10}H_{20}$) + Methyl alcohol
(CH_4O)

Delcourt, 1927

%	sat. t.	%	sat. t.
91.33	- 1.9	28.19	92.7
79.77	52.4	20.83	92.4
70.50	73.5	15.74	88.3
59.20	86.5	13.24	87.5
50.38	90.8	7.30	70.9
41.42	92.9	34.25	92.9

Cyclohexene (C_6H_{10}) (b.t.=82.75) + Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	40	55.9	-
Ethyl alcohol	C_2H_6O	78.3	34	68.7	-4.8 (34%)
Propyl alcohol	C_3H_8O	97.2	21.6	76.6	-3.2 (21.6%)
Isopropyl alcohol	C_3H_8O	82.4	37	70.6	-4.3 (37%)
Butyl alcohol	$C_4H_{10}O$	117.8	5	82.0	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	14.2	80.55	-
sec. Butyl alcohol	$C_4H_{10}O$	99.5	21	78.7	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	40	73.0	-
Amylen-hydrate	$C_5H_{12}O$	102.35	17	80.8	-
Allyl alcohol	C_3H_6O	96.85	21.5	76.4	-
Ethylen-chlorhydrin	C_2H_5OC1	128.6	11	81.0	-

Cyclohexene (C_6H_{10}) + Glycol ($C_2H_6O_2$)

Leibnitz, Konnecke and Niese, 1957

t	d		σ interface (L_1/L_2)
	L_1	L_2	
20	1.1064	0.8115	11.038
40	1.0910	0.7932	10.809
60	1.0758	0.7752	10.189

1,3-Cyclohexadiene (C_6H_8) (b.t. = 80.4) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	
Methyl alcohol	CH_4O	64.65	38.5	56.45	-
Ethyl alcohol	C_2H_6O	78.3	34.5	66.7	-
Propyl alcohol	C_3H_8O	97.2	20	75.8	-
Isopropyl alcohol	C_3H_8O	82.4	-	72.8	-
Butyl alcohol	$C_4H_{10}O$	82.55	38.5	73.45	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	11.5	79.4	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	38.15	73.4	-
Amylene hydrate	$C_5H_{12}O$	102.35	13	80.0	-
Allyl alcohol	C_3H_6O	96.85	21	75.5	-

Lecat, 1949

1,4-Cyclohexadiene (C_6H_8) (b.t.=85.6) +
Alcohols

2nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Methyl alcohol	(CH_4O)	64.65	42.5	58.0	-4.2
Ethyl alcohol	(C_2H_6O)	78.3	37	68.8	-
Isopropyl alcohol	(C_3H_8O)	82.4	-	72.8	-

Decaline ($C_{10}H_{18}$) + Methyl alcohol (CH_4O)

Francis, 1944

C.S.T. = 101

Decaline ($C_{10}H_{18}$) + Ethyl alcohol (C_2H_6O)

Weissenberger, Henke and Sperling, 1925

mol%	p	Q mix
20°		
25	37.8	-99.5
40	38.7	-153.4
50	38.9	-179.7
60	39.2	-160.0
75	40.5	-104.0
100	44.0	-

Decaline ($C_{10}H_{18}$) + Propyl alcohol (C_3H_8O)

Beck, 1928

vol%	f.t.
100	-127
83	-120
71	-100
55	-100
50	-90
0	-125

Decaline ($C_{10}H_{18}$) + Isopropyl alcohol C_3H_8O)

Weissenberger, Henke and Sperling, 1925

mol%	p
20°	
25	32.4
40	35.8
50	36.4
60	36.6
75	37.8
100	41.2

Decaline (C ₁₀ H ₁₈) + Alcohols.				
Francis, 1944				
2 nd comp.	C.S.T.			
Tetrahydrofurfuryl alcohol	(C ₅ H ₁₀ O ₂)	27		
Furfuryl alcohol	(C ₅ H ₆ O ₂)	88		
Ethylene chlorhydrin	(C ₂ H ₅ OC1)	82		
Decaline (C ₁₀ H ₁₈) + Cyclohexanol (C ₆ H ₁₂ O)				
Wulff and Takashima, 1938				
mol%	d	η	ε	
18° - 20°				
0	0.8865	2660	2.20	
10	-	-	2.36	
20	-	-	2.59	
30	0.895	4020	3.13	
50	0.906	6860	5.04	
60	0.912	9770	6.82	
70	0.921	15400	-	
85	-	36000	9.92	
100	0.941	59600	13.4	
Cavallaro, 1940				
w.l. (in m.)	0	25	50	75
mol%				
26	0.35	0.20	0.22	0.08
20	0.38	0.25	0.27	0.12
16	0.43	0.27	0.30	0.17
8	0.52	0.37	0.47	0.25
6.5	0.57	0.40	0.52	0.30
5.0	0.60	0.45	0.48	0.32
4.5	0.47	0.50	0.40	0.35
Light absorption = (D - D ₁) / D				

Tetraline (C ₁₀ H ₁₂) + Ethyl alcohol (C ₂ H ₆ O)			
Weissenberger, Schuster and Mayer, 1924			
mol%	ρ	mol%	ρ
18°			
20	25	66.5	32
33.5	30	75	31
43	31	78	31
50	33		
60	32		
mol%	η	σ	
(water = 1)			
18°			
0	2.2	0.465	
20	2.0	0.407	
33.5	2.0	0.396	
50	2.1	0.341	
66.5	1.6	0.355	
80	1.5	0.262	
Francis, 1944			
Tetraline (C ₁₀ H ₁₂) + Varia			
2nd Comp.	C.S.T.		
Ethylene glycol (C ₂ H ₆ O ₂)	213		
Diethylene glycol (C ₄ H ₁₀ O ₃)	132		
Triethylene Glycol (C ₆ H ₁₄ O ₄)	92		
Ethanolamine (C ₂ H ₇ ON)	139		
Diethanolamine (C ₄ H ₁₁ O ₂ N)	181		
Triethanolamine (C ₆ H ₁₅ O ₃ N)	187		
Isopropyl tetraline (C ₁₃ H ₁₈) + Varia			
Francis, 1944			
2nd Comp.	C.S.T.		
Methyl alcohol (CH ₄ O)	57		
Furfuryl alcohol (C ₅ H ₆ O ₂)	32		
Diethylene glycol (C ₄ H ₁₀ O ₃)	248		
Triethylene glycol (C ₆ H ₁₄ O ₄)	179		
Diethanolamine (C ₄ H ₁₁ O ₂ N)	248		
Triethanolamine (C ₆ H ₁₅ O ₃ N)	264		
Phenylethanolamine (C ₈ H ₁₁ ON)	10		
Ethylene chlorhydrin (C ₂ H ₅ OC1)	-27		

Menthene ($C_{10}H_{18}$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.	
0	170.8	
21	159.5	Az
100	197.4	

Menthene ($C_{10}H_{18}$) + Cyclohexanol ($C_6H_{12}O$)

Lecat, 1949

%	b. t.		Dt mix
0	170.8		
60	157.4	Az	
65	-		-2.0
100	160.8		

Limonene r ($C_{10}H_{16}$) + Carvoxime l ($C_{10}H_{15}ON$)

Goldschmidt and Cooper, 1898

f. t.	%	f. t.	%
24.6	30.8	43.1	56.7
30.0	37.2	48.0	66.5
38.4	51.1	55.1	76.5

Limonene r ($C_{10}H_{16}$) + Carvoxime r ($C_{10}H_{15}ON$)

Goldschmidt and Cooper, 1898

f. t.	%	f. t.	%
30.3	38.8	55.9	77.6
39.3	50.8	58.8	84.9
49.4	66.6	63.2	92.7

Limonene ($C_{10}H_{16}$) (b. t. = 177.7) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	0.8	64.58	-0.7 (5%)
Hexyl alcohol	$C_6H_{14}O$	157.85	80	157.2	-1.3 (80%)
Heptyl alcohol	$C_7H_{16}O$	176.15	50	171.7	-1.5 (20%)
Octyl alcohol	$C_8H_{18}O$	195.2	6	177.45	-2.7 (36%)
Isooctyl alcohol	$C_8H_{18}O$	180.4	42	178.4	-0.6 (30%)
Glycol	$C_2H_6O_2$	197.4	23	163.3	-
Pinacol	$C_6H_{14}O_2$	174.35	50	166.7	-
Glycerol	$C_3H_8O_3$	290.5	1	177.65	-
Cyclohexanol	$C_6H_{12}O$	160.8	73.5	159.3	-0.2 (73.5%)
Methyl cyclohexanol	$C_7H_{14}O$	168.5	60	165.3	-2.2 (60%)
Benzyl alcohol	C_7H_8O	205.25	11	176.35	-2.0 (50%)
Propoxy glycol	$C_5H_{12}O_2$	151.35	68	148.5	-
Butoxy glycol	$C_6H_{14}O_2$	172.15	53	164.0	-
Methoxy diglycol	$C_5H_{12}O_3$	192.95	33	168.5	-
Ethoxy diglycol	$C_6H_{14}O_3$	201.9	23	173.0	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	88	153.0	-1.4 (95%)
Propyl lactate	$C_6H_{12}O_3$	171.7	62	166.25	-1.5 (75%)
Isobutyl lactate	$C_7H_{14}O_3$	182.15	38	172.7	-2.6 (40%)
Dichlorethyl alcohol	$C_2H_4OCl_2$	146.2	80	143.0	-3.5 (50%)
1,3-Dichlor propyl alcohol	$C_3H_6OCl_2$	175.8	57	165.75	-3.0 (36%)
1,2-Dichlor propyl alcohol	$C_3H_6OCl_2$	182.5	44	169.0	-4.0 (32%)
1,2-Dibrom propyl alcohol	$C_3H_6OBr_2$	219.5	12	176.5	-1.8 (10%)
Ethanolamine	C_2H_7ON	170.8	37	153.0	-

1-Terpinene ($C_{10}H_{16}$) (b.t. = 173.4) + Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	72	156.5	-
Heptyl alcohol	$C_7H_{16}O$	176.15	40	169.7	-2.0 (20%)
Isooctyl alcohol	$C_8H_{18}O$	180.4	27	171.8	-1.0 (20%)
Glycol	$C_2H_6O_2$	197.4	23.5	161.0	-
Cyclohexanol	$C_6H_{12}O$	160.8	65	158.3	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	52	163.7	-3.2 (50%)
Ethoxy glycol	$C_4H_{10}O_2$	135.3	80	135.0	-
Propoxy glycol	$C_5H_{12}O_2$	151.35	65	148.0	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	50	164.0	-
Methyl diglycol	$C_5H_{12}O_3$	192.95	30	168.0	-
Methyl lactate	$C_4H_8O_3$	143.8	88	142.5	-1.9 (90%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	88	153.0	-1.4 (95%)
Propyl lactate	$C_6H_{12}O_3$	171.7	52	164.0	-2.5 (50%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	85	127.0	-
1,2-Dichloropropanol	$C_3H_6OCl_2$	182.5	40	167.5	-3.5 (40%)
1,3-Dichloropropanol	$C_3H_6OCl_2$	175.8	56	165.0	-3.3 (60%)
Ethanolamine	C_2H_7ON	170.8	26	154.0	-

Lecat, 1949

3-Terpinene ($C_{10}H_{16}$) (b.t.=183) + Alcohols.

Name	Formula	2 nd comp.		Az	
		b.t.	%	b.t.	Dt mix.
Glycol	$C_2H_6O_2$	197.4	26	166.5	-
Cyclohexanol	$C_6H_{12}O$	160.8	83	160.3	-
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	68	169	-3.0 (70%)
1,2-Dichlor-3-propanol	$C_3H_6OCl_2$	182.5	60	173.5	-4.0

Terpinolene ($C_{10}H_{16}$) (b.t. = 184.6) + Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Isooctyl alcohol	$C_8H_{18}O$	180.4	57	179.0	-1.5 (50%)
Glycol	$C_2H_6O_2$	197.4	28.5	167.4	-
Glycerine	$C_3H_8O_3$	290.5	-	184.2	-
Cyclohexanol	$C_6H_{12}O$	160.8	87	160.5	-
Benzyl alcohol	C_7H_8O	205.25	15	182.5	-
Propoxy-glycol	$C_5H_{12}O_2$	151.35	-	150.8	-
Isobutyl lactate	$C_7H_{14}O_3$	182.15	65	176.1	-2.2 (50%)

Camphene ($C_{10}H_{16}$) (b.t. = 159.6) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t..
Isobutyl carbinol	$C_5H_{12}O$	131.9	76	130.9	-
Hexyl alcohol	$C_6H_{14}O$	157.85	46	151.5	-
Heptyl alcohol	$C_7H_{16}O$	176.15	10	159.3	-
Glycol	$C_2H_6O_2$	197.8	20	152.5	-
Pinacol	$C_6H_{14}O_2$	174.35	28	155.5	-
Methoxy glycol	$C_3H_8O_2$	124.5	70	121.0	-
Ethoxy glycol	$C_4H_{10}O_2$	135.3	65	131.0	-
Propoxy glycol	$C_5H_{12}O_2$	151.35	52	144	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	30	154.5	-
Methyl lactate	$C_4H_8O_3$	143.8	67	137.0	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	55	145.0	16.4 (55%)
Propyl lactate	$C_6H_{12}O_3$	171.7	22	156.2	-
Isopropyl lactate	$C_6H_{12}O_3$	168.8	30	154.2	-
Cyclohexanol	$C_6H_{12}O$	160.8	41	152.2	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	25	155.5	-
Ethylenechlorhydrin	C_2H_5OCl	128.6	75	124.5	-
Dichloroethanol	$C_2H_4OCl_2$	146.2	75	139.0	-
1,2-Dichloropropanol	$C_3H_6OCl_2$	175.8	38	152.9	-
1,3-Dichloropropanol	$C_3H_6OCl_2$	182.5	32	154.5	-
Ethanol amine	C_2H_7ON	170.8	28	144.0	-
Diethyl ethanolamine	$C_6H_{15}ON$	162.2	-	146.5	-

Camphene ($C_{10}H_{16}$) + Borneol ($C_{10}H_{18}O$)

Eirenow, 1915

mol%	f.t.	m.t.	tr.t.
0	49.3	-	-
1.77	51.0	50.3	-
4.44	54.1	52.1	-
8.93	59.7	56.0	-
18.08	71.5	67.6	-
22.74	80.7	73.1	-
27.53	88.6	80.7	-
37.07	105.2	96.3	-
41.94	113.3	104.3	-
47.00	121.3	112.3	-
51.91	130.6	121.6	-
56.97	140.1	131.5	-
67.32	156.7	150.4	-
72.59	165.0	159.9	-
78.00	174.1	170.0	-
83.35	182.1	178.9	47.6
88.82	192.2	189.2	56.2
91.60	196.9	194.3	59.5
94.37	201.7	199.6	63.0
97.74	204.8	203.1	67.1
100	207.0	-	69.1

1-Pinene ($C_{10}H_{16}$) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.	Dt mix
0	155.8	-
15	-	-1.9
90.7	64.5	-
100	64.65	-

Lecat, 1933.

%	sat.t.	%	sat.t.
90	-50	40	61.5
85	-20	35	63
80	+4	30	63.5
75	21.5	25	64
70	29.5	20	63
65	42.5	15	60
60	48	10	55.5
55	53	5	42.5
50	56.5	2.5	31
45	59	1	0

1-Pinene ($C_{10}H_{16}$) (b.t. = 155.8) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	1	99.15	-0.5 (10%)
Butyl alcohol	$C_4H_{10}O$	117.8	88	117.4	-0.8 (88%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	99	107.97	-2.6 (50%)
Isobutyl carbinol	$C_5H_{12}O$	131.9	77	130.7	-1.3 (86%)
Hexyl alcohol	$C_6H_{14}O$	157.85	42	150.0	-1.6 (40%)
Methoxy glycol	$C_3H_8O_2$	124.5	66	120.2	-
Ethoxy glycol	$C_4H_{10}O_2$	125.3	57	131.0	-
Propoxy glycol	$C_5H_{12}O_2$	151.35	48	142.0	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	25	151.5	-
Methoxy diglycol	$C_5H_{12}O_3$	192.95	15	153.0	-
Methyl lactate	$C_4H_8O_3$	143.8	63	135.5	-5.0 (77%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	49.8	143.1	-4.2 (50%)
Propyl lactate	$C_6H_{12}O_3$	171.7	-	154.5	-1.0 (5%)
Isopropyl lactate	$C_6H_{12}O_3$	168.8	22	152.5	-1.5 (10%)
1,2-Dichlor-propyl alcohol	$C_3H_6OCl_2$	182.5	37	151.5	-2.5 (20%)
1,3-Dichlor-propyl alcohol	$C_3H_6OCl_2$	175.8	36.5	150.4	-3.3 (22%)
Ethanol-amine	C_2H_7ON	170.8	25	142.0	-

2-Pinene ($C_{10}H_{16}$) (b.t. = 163.8) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	52	153.0	-2.0 (50%)
Heptyl alcohol	$C_7H_{16}O$	176.15	15	162.6	-1.5 (10%)
Isooctyl alcohol	$C_8H_{18}O$	180.4	5	163.5	-
Glycol	$C_2H_6O_2$	197.4	19	155.0	-
Methoxy glycol	$C_3H_8O_2$	124.5	75	121.8	-
Ethoxy glycol	$C_4H_{10}O_2$	135.3	-	133.0	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	37	158.0	-
Methoxy diglycol	$C_5H_8O_3$	192.95	22	159.0	-
Methyl lactate	$C_4H_8O_3$	143.8	70	138.5	-5.5 (50%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	62	147.8	-4.0 (60%)
Propyl lactate	$C_6H_{12}O_3$	171.7	33	159.0	-1.1 (5%)
Isopropyl lactate	$C_6H_{12}O_3$	168.8	22	152.5	-1.5 (10%)
1,2-Dichlor-propanol	$C_3H_6OCl_2$	181.5	37	158.0	-3.7 (35%)
1,3-Dichlor-propanol	$C_3H_6OCl_2$	175.8	43	156.5	-4.0 (50%)

Turpentine d ($C_{10}H_{16}$) + Ethyl alcohol (C_2H_6O)

Landolt, 1876 - 1877

%	d	(α) _D	t
20°			
0 (21.1°)	0.91083	14.147°	21
26.9073	0.87648	14.496°	22.0 - 22.5
52.4876	0.84642	14.788°	22.0
77.7557	0.81864	15.095°	21.5 - 24.0

Landolt, 1876 - 1877

%	d	n _D	(α) _D
20°			
0	0.86290	1.47027	37.010
9.947	0.85558	1.45787	37.035
30.0584	0.83923	1.43441	37.247
50.0342	0.82542	1.41244	37.548
70.0285	0.81273	1.39151	37.904
89.9922	0.80108	1.37174	38.486
100	0.79570	1.36242	-

Rimbach, 1892

%	d	(α) _D
20°		
0	0.8648	34.809
10.314	0.8550	34.892
32.677	0.8368	34.980
49.007	0.8247	35.119
68.567	0.8108	35.363
79.899	0.8033	35.784
89.888	0.7969	35.999
100	0.7911	-

Bussy and Buignet, 1864

50 vol% 22.40° Dt = -2.40°

* Limonenes + Oximes : see page 46 .

XXII. AROMATIC HYDROCARBONS + OXIMES AND ALCOHOLS .

Benzene (C_6H_6) + Acetoxime (C_5H_7ON)

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	3.40	4.35
0.09	5.39	4.48	4.03
0.22	5.337	4.62	4.022
0.33	5.30	5.88	3.62
0.68	5.18	7.19	3.23
0.83	5.122	8.32	2.885
1.69	4.86	8.94	2.740
2.19	4.722	13.09	+1.457
2.50	4.62	17.88	-0.178
2.88	4.51	23.09	-2.108

Benzene (C_6H_6) + Benzaldoxime (C_7H_7ON)

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	5.87	3.920
0.37	5.295	6.44	3.825
0.43	5.260	7.34	3.600
0.72	5.175	8.64	3.330
1.17	5.040	9.93	3.060
1.79	4.860	11.62	2.720
1.98	4.840	13.35	2.340
2.64	4.650	14.78	2.040
3.54	4.435	15.08	3.105
4.88	4.130	22.13	0.700

Benzene (C_6H_6) + Acetophenoxime (C_8H_9ON)

Innes, 1918

wt %	mol %	p	wt %	mol %	p
75°					
0	0	651.2	41.2	28.9	529.7
5.50	3.26	634.2	57.9	44.4	456.9
10.91	6.60	620.3	75.4	63.8	340.5
19.2	12.04	597.9	82.4	72.9	277.0
29.2	19.25	569.3			

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	0	3.435
0.62	5.260	11.41	2.925
1.41	5.075	14.85	2.165
4.21	4.470	18.22	1.385
6.94	3.890	22.40	0.365

Turpentine d ($C_{10}H_{16}$) + Ethyl alcohol (C_2H_6O)

Landolt, 1876 - 1877

%	d	(α) _D	t
20°			
0 (21.1°)	0.91083	14.147°	21
26.9073	0.87648	14.496°	22.0 - 22.5
52.4876	0.84642	14.788°	22.0
77.7557	0.81864	15.095°	21.5 - 24.0

Landolt, 1876 - 1877

%	d	n _D	(α) _D
20°			
0	0.86290	1.47027	37.010
9.947	0.85558	1.45787	37.035
30.0584	0.83923	1.43441	37.247
50.0342	0.82542	1.41244	37.548
70.0285	0.81273	1.39151	37.904
89.9922	0.80108	1.37174	38.486
100	0.79570	1.36242	-

Rimbach, 1892

%	d	(α) _D
20°		
0	0.8648	34.809
10.314	0.8550	34.892
32.677	0.8368	34.980
49.007	0.8247	35.119
68.567	0.8108	35.363
79.899	0.8033	35.784
89.888	0.7969	35.999
100	0.7911	-

Bussy and Buignet, 1864

50 vol% 22.40° Dt = -2.40°

* Limonenes + Oximes : see page 46 .

XXII. AROMATIC HYDROCARBONS + OXIMES AND ALCOHOLS .

Benzene (C_6H_6) + Acetoxime (C_5H_7ON)

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	3.40	4.35
0.09	5.39	4.48	4.03
0.22	5.337	4.62	4.022
0.33	5.30	5.88	3.62
0.68	5.18	7.19	3.23
0.83	5.122	8.32	2.885
1.69	4.86	8.94	2.740
2.19	4.722	13.09	+1.457
2.50	4.62	17.88	-0.178
2.88	4.51	23.09	-2.108

Benzene (C_6H_6) + Benzaldoxime (C_7H_7ON)

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	5.87	3.920
0.37	5.295	6.44	3.825
0.43	5.260	7.34	3.600
0.72	5.175	8.64	3.330
1.17	5.040	9.93	3.060
1.79	4.860	11.62	2.720
1.98	4.840	13.35	2.340
2.64	4.650	14.78	2.040
3.54	4.435	15.08	3.105
4.88	4.130	22.13	0.700

Benzene (C_6H_6) + Acetophenoxime (C_8H_9ON)

Innes, 1918

wt %	mol %	p	wt %	mol %	p
75°					
0	0	651.2	41.2	28.9	529.7
5.50	3.26	634.2	57.9	44.4	456.9
10.91	6.60	620.3	75.4	63.8	340.5
19.2	12.04	597.9	82.4	72.9	277.0
29.2	19.25	569.3			

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	0	3.435
0.62	5.260	11.41	2.925
1.41	5.075	14.85	2.165
4.21	4.470	18.22	1.385
6.94	3.890	22.40	0.365

Benzene (C_6H_6) + 3-Benzilmonoxime ($C_{14}H_{11}O_2N$)

Innes, 1918

wt %	mol %	p	wt %	mol %	p
75°					
0	0	653.0	29.7	12.71	601.0
5.69	2.03	641.4	40.1	18.72	581.7
11.11	4.15	632.1	47.6	23.98	564.3
20.0	8.00	616.8			

Benzene (C_6H_6) + Camphoroxime d ($C_{10}H_{17}ON$)

Beckmann, 1888

%	f.t.	%	f.t.
0	5.44	6.56	4.812
0.53	5.330	9.80	3.720
1.37	5.180	13.00	3.095
2.78	4.953	20.32	1.445
4.45	4.675		

Benzene (C_6H_6) + Camphoroxime r ($C_{10}H_{17}ON$)

Innes, 1918

wt %	mol %	p	wt %	mol %	p
75°					
0	0	651.6	29.7	16.5	582.0
5.80	2.80	639.4	41.9	25.2	541.7
10.90	5.40	628.7	55.6	37.2	478.3
19.9	10.4				

Benzene (C_6H_6) + Methyl alcohol (CH_4O)

Heterogeneous equilibria .

Schmidt, 1921 and 1926

mol %	p			
	0°	10°	20°	30°
0	26.9	46.2	76.7	122
10	36.4	66.8	106	167
20	44.1	79.6	128	209
30	48.5	84.7	138.5	221.5
40	48.8	86.8	143	227
50	49.1	88.7	145	230
60	49.2	89.1	145	231
70	48.6	88.4	144	229
80	48.3	86.7	141	227
90	44.2	76.4	124	207
100	31.9	55.2	95	162.5

mol %	p			
	40°	60°	80°	100°
0	186	394	755	1344
10	270	622	1208	2150
20	335	742	1462	2658
30	354	802	1581	2845
40	360	811	1611	2875
50	363	816	1627	2889
60	365	827	1631	2894
70	362	824	1622	2884
80	350	782	1581	2837
90	319	718	1490	2723
100	257	601	1263	2464

Ryland, 1899

% V		P	% V		P
L	V		L	V	
38	38.4	770	36 Az	35.7	392
38	39.0	760	41	33.2	223
37	36.8	400	34	33.1	223

Soday and Bennets, 1930

b. t.	%		b. t.	%	
	V	L		V	L
725.2 mm					
78.6	0	0	56.4	38.0	12.0
68.2	8.0	1.0	56.5	37.85	10.0
63.9	15.0	1.5	56.6	38.0	40.0
60.3	24.0	2.0	56.9	45.0	60.0
58.8	28.0	-	57.6	50.5	69.8
57.7	30.0	2.5	58.3	58.0	79.0
57.5	30.0	2.7	59.55	69.0	86.8
57.25	32.0	-	61.9	85.8	95.9
56.75	33.0	4.0	63.1	100	100

Lee, 1931

mol%				
L	V	P	P ₁	P ₂
40°				
14.1	50.7	349.0	172	176.9
22.7	52.4	536.6	170.5	186.5
30.4	53.1	360.2	170.0	192.5
40.2	54.0	364.2	167.5	196.7
46.8	54.3	365.6	167.1	198.5
55.2	54.8	366.0	165.4	200.6
64.3	56.6	366.2	158.9	207.3
70.2	58.0	362.5	152.2	210.3
75.0	57.8	357.5	150.9	206.6
83.4	64.1	334.0	109.6	224.9
89.6	72.3	325.2	90.1	235.1
91.5	75.3	322.5	80.6	241.9
100.0	100.0	263.5	0.0	269.5

Fritzweiler and Dietrich, 1933 (fig.)

b. t.	mol%		b. t.	mol%	
	L	V		L	V
64.7	100	100	60	12	52
64	99	96.1	62	8.5	48.5
63	98	92.5	64	6.5	45
62	96	87.5	66	5.5	41
61	94	82	68	5	36
60	91.5	76.5	70	4	31
59	87.5	72.5	72	3.5	25.5
58	80	63.5	74	2.5	20
57	-	67	76	1.9	14
58	27.5	57.5	78	1	10.5
59	15	54	78.3	0	0

Scatchard, Wood and Mochel, 1946

mol %		p
L	V	
25°		
47.42	53.43	182.70
35°		
2.42	27.33	203.29
2.54	31.28	211.10
13.02	48.58	274.25
31.07	53.04	288.47
49.89	55.46	292.50
51.91	55.71	292.70
63.05	57.90	292.49
79.65	64.21	283.58
91.97	76.88	255.82
45°		
52.34	57.52	451.98
55°		
3.04	30.19	465.84
4.93	40.51	527.12
10.31	48.41	597.48
32.17	55.40	664.24
48.74	58.45	675.99
60.76	60.78	678.44
78.98	67.16	664.91
90.14	76.97	622.29

Williams, Rosenberg and Rothenberg, 1948

t	mol %		t	mol %	
	L	V		L	V
78.00	0	4.5	58.00	34.0	58.5
77.60	0	21.0	59.80	36.5	57.0
67.30	2.5	42.3	57.50	62.5	61.0
60.80	5.0	49.5	57.70	73.0	63.9
58.60	7.0	57.5	59.30	77.6	73.5
62.80	7.7	52.5	58.50	81.2	68.5
58.70	13.4	55.7	59.20	86.0	72.0
58.30	17.0	57.0	62.85	97.7	92.0
57.80	18.0	57.2			

Scatchard and Ticknor, 1952

mol %		p
L	V	
55°		
4.05	35.18	493.58
6.38	42.10	545.73
7.71	44.62	565.10
22.98	54.22	647.85
59.88	60.56	678.27

Haywood, 1899

%	b. t.	%	b. t.
0	80.25	43.2	58.3
7.3	60.95	48.6	58.4
10.3	59.85	50.7	58.42
12.5	59.4	53.2	58.45
16.6	58.92	57.5	58.6
18.8	58.8	64.7	59.0
23.8	58.525	73.7	59.8
26.1	58.475	83.5	61.2
30.3	58.4	93.1	63.2
34.3	58.3	100	65.0
38.2	58.3		

Young and Fortey, 1902

%	b. t. (760 mm)
39.55	58.34 Az
100	64.70
dp/dt of Az (at b. t.) = 28.1	

Kafarov and Gordievskii, 1956 (fig.)

mol %		mol %	
L	V	L	V
b. t.			
0	0	50	59.5
5	38.5	60	60
10	48.5	70	60.5
20	55	80	63
30	57	90	86
40	58	100	100

Robinson, Wright and Bennet, 1932

	mol%	b. t.
Az	57.6	20.0
	59.2	40.0
	60.6	57.0

Fritzweiler and Dietrich, 1933

	mol%	b. t.	dew. point
	100	64.6	64.6
	95	61.3	63.6
	90	59.6	62.5
	85	58.6	61.6
	80	58.0	60.6
	75	57.7	59.5
	70	57.5	58.3
	65	57.4	57.6
	60	"	57.5
	55	"	58.7
	50	"	60.9
	45	57.5	64.6
	40	57.6	66.4
	35	57.7	68.4
	30	57.9	70.9
	25	58.1	72.2
	20	58.3	73.9
	15	59.1	75.5
	10	61.0	77.1
	5	68	78.8
	0	80.2	80.2

Lecat, 1949

	%	b. t.	Dt mix
	0	80.15	
	39.5	58.32 Az	
	47	-	-3.2
	100	64.65	

Pickering, 1893

	%	f. t.	%	f. t.
	0	+5.44	47.477	-4.26
	2.261	+3.80	52.490	-6.06
	4.542	+3.21	57.552	-8.27
	9.341	+2.46	62.668	-11.97
	13.758	+1.97	67.837	-16.10
	18.432	+1.52	73.228	-22.56
	23.154	+1.06	78.334	-29.36
	27.923	+0.45	83.663	-41.46
	32.739	-0.29	89.053	-55.46
	37.601	-1.35	94.497	-68.96
	42.514	-2.40		

Perrakis, 1925

	mol%	f. t.	mol%	f. t.
	0	5.40	72.82	-4.9
	7.84	3.25	77.02	-7.6
	15.78	3.00	80.61	-9.7
	25.0	2.4	83.55	-11.5
	36.92	2.1	86.33	-17.0
	42.68	1.85	90.14	-23
	50.61	1.4	92.93	-46
	57.43	-0.1	95.07	-67
	63.33	-1.35	100	-94
	69.00	-3.2		

Vieth, 1929

	%	f. t.
	76.9	-6.8
	69.9	-3.8
	62.1	-1.6
	57.2	-0.6
	40.3	+2.0
	38.1	+2.3

C.S.T. : lower than 0°

Lee, 1931

	mol%	D f. t.
	0.8	-0.360
	1.6	0.612
	4.2	1.265
	6.5	1.610
	9.7	1.978
	15.1	2.475
	25.0	3.000
	36.9	3.30

Giacalone, 1942

	%	D f. t.	%	D f. t.
	0.50	-0.620	27.00	-4.473
	1.18	1.123	30.22	4.513
	2.63	1.670	33.21	5.345
	3.66	1.913	36.07	5.721
	5.90	2.329	38.57	6.233
	8.76	2.723	40.76	6.713
	11.54	3.013	42.60	7.153
	14.43	3.263	44.71	9.70
	17.43	3.533	57.56	13.71
	20.69	3.830	67.85	21.54
	23.71	4.122	69.24	34.80

Lemonde, 1938

vol%	D
11°	
2	1.89 or 1.30
12.5	0.61
20	0.61
35	0.70
50	0.93
70	1.56
85	1.87
98	2.22

Tichacek, Kmak and Drickamer, 1956

mol %	D therm.
40°	
20	+1.80
50	+0.15
80	-0.80

Johnson and Babb, 1956 (fig.)

mol%	D	
	benzene	methyl alcohol
25°		
0	2.20	4.20
5	2.28	3.00
10	2.30	2.60
20	2.32	2.20
30	2.38	2.12
40	2.40	2.00
60	2.40	2.00
70	2.40	2.03
80	2.40	2.08
90	2.40	2.12
100	2.42	2.25

Properties of phases .Density .

Schmidt, 1926

%	Dv .10 ⁴	%	Dv .10 ⁴
17°			
90	- 4	40	-17
80	- 7	30	-19
70	- 9	20	-21
60	-12	11	-13
50	-14		

Findlay, 1909

%	t	d
100	63.7	0.7503
81.86	59.9	0.7691
68.40	58.2	0.7801
58.40	57.6	0.7886
49.9	57.4	0.7954
36.7	57.2	0.8055
29.6	57.3	0.8122
21.5	57.6	0.8189
9.6	59.0	0.8269
8.1	59.6	0.8276
0	79.3	0.8150

Jahn, 1891.

%	d
20°	
100	0.87852
31.99	0.81812
0	0.79212

Fischler, 1913

vol%	d
25°	
0	0.7860
25	0.8071
50	0.8273
75	0.8485
100	0.8696

Washburn and Lightbody, 1930

mol%	d	mol%	d
25°			
0	0.87285	86.8	0.80884
10.4	0.86833	92.6	0.80022
19.6	0.86394	95.2	0.79571
27.9	0.85961	97.7	0.79127
42.3	0.85118	100	0.78698
68.7	0.83014		

Perrakis, 1925			
mol%		d	
20°			
0	0.8778	46.54	0.8536
8.72	0.8748	51.85	0.8500
13.81	0.8723	60.31	0.8433
20.71	0.8688	64.94	0.8393
23.62	0.8674	71.75	0.8323
26.55	0.8658	77.71	0.8262
28.79	0.8646	84.94	0.8171
32.95	0.8630	90.39	0.8090
37.48	0.8598	100	0.7917
42.58	0.8561		

Velasco, 1930			
mol%		d	
20°			
2.48	0.8785	26.31	0.8663
4.34	0.8778	27.86	0.8660
5.79	0.8765	33.02	0.8631
8.01	0.8760	39.67	0.8591
11.48	0.8741	42.38	0.8574
14.16	0.8720	44.42	0.8560
17.11	0.8706	44.68	0.8558
21.25	0.8696	49.81	0.8526
24.60	0.8677		

Velasco, 1931			
t	d	t	d
0 mol%		15.78 mol%	
34.5	0.8637	35.4	0.8685
29.8	0.8686	33.7	0.8687
24.9	0.8734	28.8	0.8694
20.0	0.8786	25.0	0.8698
15.1	0.8834	20.5	0.8704
10.5	0.8882	15.2	0.8711
		8.3	0.8720
			20.0
			14.9
			14.1

t	d	t	d	t	d
48.04 mol%		59.45 mol%		67.70 mol%	
35.2	0.8514	35.3	0.8431	35.2	0.8359
29.8	0.8521	24.8	0.8444	30.3	0.8364
25.6	0.8527	20.4	0.8449	25.6	0.8370
20.2	0.8534	14.9	0.8456	20.3	0.8377
15.0	0.8541	10.9	0.8461	15.2	0.8383
10.8	0.8546			10.5	0.8389

t	d	t	d	t	d
76.37 mol%		85.34 mol%		90.04 mol%	
35.1	0.8269	35.3	0.8157	35.6	0.8088
30.3	0.8275	30.2	0.8163	30.6	0.8094
25.1	0.8281	25.2	0.8168	25.2	0.8100
19.0	0.8288	20.2	0.8175	20.2	0.8106
15.1	0.8293	15.0	0.8181	15.1	0.8112
11.0	0.8298	10.9	0.8186	9.8	0.8118

t	d	t	d
95.35 mol%		100 mol%	
35.3	0.8001	52.2	0.7904
30.2	0.8007	47.2	0.7910
25.1	0.8013	39.7	0.7919
20.2	0.8019	35.1	0.7924
15.0	0.8025	30.9	0.7929
10.4	0.8030	25.0	0.7936
		19.5	0.7943
		12.6	0.7951

Pesce and Evdokimoff, 1940			
%		d	
25°			
0		0.87363	
11.365		0.86288	
35.294		0.84102	
47.896		0.82990	
59.703		0.81990	
73.089		0.80863	
86.112		0.79787	
100		0.78753	

Harms, 1943			
mol%		d	
		6°	30°
0	0.89358		0.86801
12.56	0.88819		0.86263
25.03	0.88203		0.85673
37.63	0.87450		0.84947
50.00	0.86587		0.84125
62.66	0.85525		0.83114
74.93	0.84253		0.81908
87.53	0.82589		0.80280
100	0.80436		0.78182

Scatchard, Wood and Mochel, 1946					
wt%		mol%		d	
25°					
0		0		0.87368	
7.61		16.73		0.86606	
13.00		26.70		0.86103	
19.98		37.83		0.85461	
29.59		50.60		0.84598	
41.07		62.95		0.83586	
41.26		63.13		0.83572	
54.64		74.60		0.82412	
74.43		87.65		0.80741	
100		100		0.78654	

Williams, Rosenberg and Rothenberg, 1948

vol%	d	vol%	d
25°			
100	0.7865	40	0.8410
90	0.7960	30	0.8495
80	0.8040	20	0.8576
70	0.8128	10	0.8653
60	0.8230	0	0.8724
50	0.8320		

Teitelbaum, Gortalova and Ganelina, 1950

mol %	d
20°	
0	0.8788
10	0.8748
20	0.8694
40	0.8597
60	0.8432
80	0.8229
90	0.8094
100	0.7923

Scatchard and Ticknor, 1952

mol%	d
25°	
0	0.87351
25.186	0.85158
49.387	0.83083
72.871	0.81049
100	0.78653

G.L. Starobinets, K.S. Starobinets and Rigikova, 1951

mol%	d	mol%	d
25°			
0.00	0.8733	40.49	0.8539
10.33	0.8694	49.64	0.8493
20.54	0.8644	60.03	0.8403
30.82	0.8598	100.00	0.7872

Shakhparonov and Shlenkina, 1954.

mol%	$\tau \cdot 10^3$	π
20°		
0	1.23	94.9
10	1.21	94.2
20	1.19	94.4
30	1.18	95.0
40	1.18	96.5
50	1.17	98.8
60	1.17	101.5
70	1.16	104.4
80	1.17	108.3
90	1.17	113.4
100	1.18	120.8

τ - temperature coefficient of the dilatation (volume).

π - compressibility coefficient.

Viscosity and surface tension .

Findlay, 1909

%	t	η
0	79.3	317
8.1	59.6	359
9.6	59.0	362
21.5	57.6	362
29.6	57.3	360
36.7	57.2	361
49.9	57.4	359
58.40	57.6	359
68.40	58.2	354
81.86	59.9	347
100	63.7	326

Lemondc, 1938

vol%	η
11°	
0	747
2	747
12.5	747
20	746
35	745
50	741
70	730
85	711
98	683
100	677

Teitelbaum, Gortalova and Ganelina, 1950

mol%	η
20°	
0	646
10	622
20	613
40	619
60	626
80	626
90	610
100	578

Fischler, 1913

vol%	η
25°	
0	560.8
25	564.5
50	568.4
75	572.3
100	575.8

Morgan and Scarietti, 1917

%	σ 30°	%	σ 0°
0	26.625	0	30.514
15.04	25.188	19.943	28.143
20.06	24.804	25.00	27.779
25.10	24.510	30.07	27.440
30.13	24.235	70.07	25.211
50.04	23.270	100	23.643
75.15	22.125		
100	21.058		

Giacalone, 1942

mol%	σ 27°
3.63	26.04
2.82	26.35
1.88	26.80
0.94	27.30
0	27.95

Rigilova, 1951

mol%	σ 25°	mol%	σ
0.00	28.20	40.49	26.22
10.33	27.88	49.64	25.86
20.54	27.33	60.03	25.24
30.82	26.84	100.00	22.35

Optical and electrical properties

Velasco, 1931

t	n_D	t	n_D	t	n_D
0 mol%		15.78 mol%		34.74 mol%	
34.5	1.4908	34.8	1.47735	34.15	1.4583
29.8	1.4940	28.4	1.48140	28.95	1.4614
24.9	1.4974	24.6	1.4839	24.00	1.4645
20.0	1.5006	20.0	1.4856	20.00	1.4668
15.1	1.5040	15.0	1.4890	14.7	1.4702
10.5	1.5071	8.5	1.4933		

t	n_D	t	n_D	t	n_D
48.04 mol%		59.45 mol%		67.70 mol%	

34.5	1.4390	34.5	1.4221	34.5	1.4071
29.4	1.4421	29.3	1.4251	29.7	1.4098
24.7	1.4450	24.5	1.4278	24.7	1.4124
20.0	1.4476	20.0	1.4304	20.0	1.4150
14.9	1.4506	14.9	1.4332	15.1	1.4176
10.3	1.4533	10.6	1.4355	10.6	1.4199

t	n_D	t	n_D	t	n_D
76.37 mol%		85.34 mol%		90.04 mol%	

34.4	1.3901	34.3	1.3682	34.4	1.3553
29.4	1.3924	29.3	1.3706	30.0	1.3575
24.7	1.3951	24.8	1.3729	24.9	1.3598
20.0	1.3974	20.0	1.3753	20.0	1.3623
15.2	1.3999	14.9	1.3776	15.0	1.3646
11.3	1.4018	10.9	1.37945	9.9	1.3668

t	n_D	t	n_D	t	n_D
95.35 mol%		100 mol%			

34.6	1.3391	33.5	1.3215
29.6	1.3414	29.0	1.3262
24.8	1.3434	24.0	1.3284
20.0	1.3456	20.0	1.3300
15.0	1.3479	14.2	1.3325
10.5	1.3498		

Rabcewicz-Zubkowski, 1933

%	n_D	%	n_D
15°			
0	1.5033	55	1.4017
5	1.5012	60	1.3931
10	1.4994	65	1.3842
15	1.4788	70	1.3762
20	1.4690	75	1.3679
25	1.4580	80	1.3605
30	1.4478	85	1.3532
35	1.4378	90	1.3456
40	1.4293	95	1.3390
45	1.4212	100	1.3320
50	1.4112		

Pesce and Evdokimoff, 1940

t	He	t	He
25°			
100	1.32643	47.896	1.40998
86.112	1.34760	35.294	1.43201
73.089	1.36806	11.365	1.47589
59.703	1.39005	0	1.49825

Williams, Rosenberg and Rothneberg, 1948

vol%	n _D	vol%	n _D
25°			
100	1.3264	40	1.4296
90	1.3429	30	1.4471
80	1.3595	20	1.4640
70	1.3765	10	1.4809
60	1.3942	0	1.4967
50	1.4121		

La Rochelle and Vernon, 1950

mol%	n _D	mol%	n _D
25°			
0	1.4977	61.3	1.4264
14.0	1.4859	70.0	1.4092
35.3	1.4643	77.5	1.3924
36.2	1.4637	84.0	1.3762
49.7	1.4459	89.5	1.3595
50.8	1.4439	95.5	1.3420
60.1	1.4281	100	1.3277

Scatchard and Ticknor, 1952

mol%	n _D
25°	
0	1.4979
25.186	1.4539
49.387	1.4121
72.871	1.3721
100	1.3267

Shakhparonov and Shlenkina, 1954

mol%	n _D ²⁰	D (19-20°)	I
0	1.50013	0.433	2.95
10	-	0.330	3.48
20	1.48309	0.230	4.07
31	1.47079	0.146	5.51
40	1.45985	0.121	5.83
50	1.44514	0.109	6.04
64.5	1.42118	0.109	5.00
80	1.38922	0.109	3.05
100	1.32846	0.071	0.56

D - degree of optical depolarisation.

I - relative intensity of the molecular light dispersion.

Kafarov and Bordievskii, 1956(fig)

%	n _D	%	n _D
0	1.5010	20° 75	1.364
25	1.458	100	1.3288
50	1.410		

Velasco, 1930

mol%	ε	mol%	ε
20°			
2.48	2.357	26.31	4.158
4.34	2.425	27.86	4.363
5.79	2.483	33.02	5.141
8.01	2.580	39.67	6.297
11.48	2.765	42.38	6.788
14.16	2.940	44.42	7.246
17.11	3.167	44.68	7.306
21.25	3.573	49.81	8.387
24.60	3.957		

Romanow and Eltzin, 1937

%	ε
75	21.00
50	13.86
25	7.11
10	3.39
5	2.5
0	2.27

La Rochelle and Vernon, 1950

mol%	ε	mol%	ε
25°			
0	2.27	61.3	12.83
14.0	3.67	70.0	16.33
35.3	6.41	77.5	19.69
36.2	6.70	84.0	22.95
49.7	9.20	89.5	26.30
50.8	9.54	95.5	29.51
60.1	12.24	100	32.65

Starobinets, Starobinets and Rigikova, 1951

mol%	ε	mol%	ε
25°			
0.00	2.271	40.49	7.370
10.33	2.875	49.64	10.10
20.54	3.861	60.03	13.12
30.82	5.438		

Jahn, 1891

%	(α) _{magn.}
20°	
0	70.81
31.99	114.79
100	223.92

Heat constants .

Timofeev, 1905

%	U
20 °	
0	0.4233
3.52	0.459
5 (?)	0.495
5.21	0.487
13.7	0.507
35.75	0.585
100	0.600

initial	%	final	Q dil (by mole alcohol)
0		2.88	-1898
2.88		5.5	724
0		5.4	-1319
5.4		10.3	380
10.3		15.8	231
33.7		37.2	54.3
(by mole benzene)			
37.4		35.4	-247
77.7		72.8	344
84.1		77.7	331
91.9		84.1	344
100		91.9	356

Williams, Rosenberg and Rothenberg, 1948

vol%	U		
	30°	40°	50°
10	0.444	0.473	0.491
20	0.483	0.502	0.530
30	0.480	-	0.556
40	0.534	0.555	0.574
50	0.525	0.561	0.605
60	0.578	0.563	0.628
	-	0.610	0.643
70	0.570	0.601	0.639
80	0.563	0.600	0.641
	0.568	-	-
90	0.582	0.606	0.651

mol°	Q mix	mol°	Q mix
10	-134	60	-124
20	152	70	98
30	158	80	66
40	154	90	35
50	144		

Schmidt, 1926

%	Q mix (cal/g)
15°	
90	-0.41
80	0.80
70	1.19
60	1.59
50	1.98
40	2.27
30	2.43
20	2.28
11	2.23

Wolf, Pahlke and Wehage, 1935 (fig)

mol%	Q mix (by mole alcohol)
20°	
7	-1750
15	1140
25	770
50	300
75	100

Scatchard, Ticknor and al., 1952

vol%	Q mix (cal/cc)
20°	
5.59	-1.64
11.34	-2.02
11.62	-2.05
24.85	-2.17
47.66	-1.93
48.28	-1.86
49.18	-1.97

Benzene (C_6H_6) + Ethyl alcohol (C_2H_5O)

Heterogeneous equilibria.

Skirrow, 1902

%		p	
	25°		95.9
0		125	
15.43		119	
52.34		59	
100			

Schreinemakers, 1904

%		p			
	34.8°		50°	60°	66°
0	147	271	389	477	
2.07	174	326	471	568	
3.85	185	347	503	620	
9.47	195	371	545	677	
17.38	198	379	562	702	
25.64	198	382	570	711	
32.15	197	380	569	711	
50.14	190	371	557	697	
64.91	178	351	530	671	
79.88	155	311	479	609	
93.28	122	257	403	520	
100	103	223	354	462	

Burwinkel, 1914

t		p						
	100	84.53	66.57	45.12	32.08	17.87	0.0%	
0	13	-	-	-	-	-	-	-
10	24	40	53	63	61	61	46.8	
20	45	72	88	102	106	104	76.9	
30	78	120	147	174	178	174	124	
40	133	205	258	287	288	269	186	
50	225	307	375	422	426	408	275	
60	358	458	553	607	609	580	397	
70	545	674	-	-	-	-	560	

Lehfeldt, 1898

%		p	
	50°		
0		270.9	
4.32		339.8	
11.11		389.9	
18.87		404.3	
23.20		406.4	
38.81		400.3	
46.75		394.0	
60.33		375.3	
72.37		345.8	
81.32		318.8	
90.61		274.3	
100		219.5	

% at b.t.

L	V
5.4	18.7
7.5	21.9
13.9	24.7
24.5	27.5
32.0	29.7
43.0	32.6
58.0	38.3
82.1	54.3

Lehfeldt, 1899

mol%		p	
L	V		
	50°		
0	0	270.9	
8.1	21.9	350.4	
47.0	40.1	315.0	
100	100	219.5	

Ryland, 1899

%		p	
L	V		
33	31.4	769	
33	32.3	763	
33	28.2	421	
28	27.6	423	
28	23.3	241	
23	23.4	243	

Az : 32% b.t. = 67 - 68°

Tyrer, 1912

%		b.t.	
L	V		
	750 mm		
100	100	78.12	
90	68.6	74.40	
80	56.0	71.86	
70	47.6	70.26	
60	41.8	69.00	
50	37.6	68.41	
40	34.0	67.97	
30	31.3	67.76	
20	28.6	68.20	
10	23.6	69.54	
0	0	79.75	
Az =	31.8%	67.76°	

Fritzweiler and Dietrich, 1933 (fig.)						Carroll, Rollefson and Mathews, 1925 (fig.)			
b.t.	L mol% v		b.t.	L mol% v		% (at b.t.)		% (a. b.t.)	
	L	v		L	v	L	V	L	V
78.3	100	100	69	15	38	100	100	40	34
78	99.9	98.5	70	10	35	90	72.5	30	32
77	99.75	95	71	8.5	32	80	57	20	30
76	98.5	90	72	7.5	29	70	48	10	25
75	98	84.5	73	6.5	26	60	42	0	0
74	95.5	78.5	74	5.5	21	50	37		
73	93	73.5	75	5	19.5				
72	90.5	69	76	4	15.5				
71	87	65	77	3	12				
70	83.5	61	78	2	7.5				
69	77.5	55.5	79	1	4				
68	47.5	47.5	80.1	0	0				
Udovenko and Fatkoulina, 1952						Brown and Smith, 1954			
L	mol% v		p	p1	p2	mol%		p	
	L	v				L	V		
			40°						
100	100	134.4	0.0	134.4			45.00°		
98.7	91.2	145.6	12.8	132.8		0	0	223.74	
94.3	74.7	169.5	42.9	126.6		3.74	19.65	271.01	
88.0	60.5	196.3	77.5	118.8		9.72	28.95	296.53	
80.2	50.7	219.4	108.2	111.2		21.83	33.70	306.55	
70.2	44.0	237.3	132.9	104.2		31.41	36.25	309.33	
59.2	40.5	245.7	146.2	99.5		41.50	38.42	309.59	
49.0	33.4	248.8	153.2	95.6		51.99	40.65	307.46	
37.3	36.2	252.3	160.9	91.4		52.84	41.01	306.99	
20.4	33.2	249.1	166.4	82.7		61.55	43.43	302.05	
9.5	28.0	239.8	172.6	67.2		70.87	47.51	291.81	
2.0	14.5	208.4	178.2	30.2		81.02	54.56	271.08	
0	0	183.8	183.8	0		91.93	70.78	227.72	
						95.91	82.01	203.28	
						100	100	172.87	
			50°			Az : 37.5 mol% 309.75 mm			
100	100	222.6	0.0	222.6					
98.4	90.9	239.6	21.8	217.8					
93.6	74.5	276.8	70.6	206.2					
86.6	61.0	316.8	123.5	193.3					
79.0	52.6	344.4	163.2	181.2					
69.4	47.0	366.9	194.4	172.5					
58.6	43.4	378.1	214.0	164.1					
48.6	41.1	383.2	225.7	157.5					
38.5	39.2	384.6	233.8	150.8					
20.6	36.0	378.3	242.3	136.0					
8.9	30.0	358.7	251.1	107.6					
2.5	16.5	314.7	262.8	51.9					
0.0	0	271.6	271.6	0.0					
			60°						
100	100	353.6	0.0	353.6					
98.1	90.4	377.4	36.2	341.2					
92.9	74.7	431.6	109.2	322.4					
85.9	62.5	485.0	181.9	303.1					
77.1	53.7	524.2	242.8	281.4					
68.0	49.0	548.7	279.8	268.9					
56.8	45.5	562.6	306.8	256.0					
43.4	43.6	566.6	319.5	247.1					
39.8	42.0	568.0	329.4	238.6					
32.2	40.8	565.0	334.5	230.5					
18.5	37.5	553.7	346.0	207.7					
8.0	31.0	518.2	357.5	160.7					
2.6	16.1	452.7	379.8	72.9					
0	0	393.0	393.0	0.0					
Regnault, 1862						N.B. No concentration is given.			
b.t.	p		b.t.	p					
30.64	165.49	60.59	599.68						
30.67	166.09	60.59	599.69						
36.09	215.62	66.46	748.74						
36.12	216.32	85.29	1441.84						
41.15	271.26	85.29	1441.84						
41.15	271.46	102.67	2450.37						
41.50	271.36	102.70	2450.07						
41.52	271.86	113.47	3318.59						
41.52	271.86	113.45	3315.69						
45.69	326.72	113.43	4003.86						
45.68	326.53	120.37	3996.86						
49.92	391.52	127.39	4786.75						
49.92	391.73	127.31	4782.78						
53.41	452.59	134.34	5682.78						
53.43	452.59	134.31	5679.26						
57.31	527.55	141.63	6759.30						
57.31	527.35	141.60	6754.50						

Thayer, 1898				Barbaudy, 1927			
%	p	b. t.		%	b. t.	%	b. t.
0	736.9	79.5					
4.82	728.5	70.8					
6.13	728.5	69.6					
7.36	728.5	68.8					
14.72	736.3	67.6					
24.00	736.0	67.1					
32.85	735.8	66.9					
40.79	735.3	67.1					
55.55	732.9	67.5					
64.89	732.9	68.4					
72.86	732.9	69.8					
84.14	732.9	72.1					
100	-	73					
Schreinemakers, 1904				Fritzweiler and Dietrich, 1933			
%	200 mm	380 mm	760 mm	mol%	b. t.	dew. p.	
0	42.2	59.3	80.3	0	80.2	80.2	
2.07	38.0	54.1	74.3	5	75.0	78.7	
3.85	36.5	52.4	72.0	10	70.0	77.3	
9.47	35.3	50.55	69.2	15	69.0	76.1	
17.38	35.1	50.1	68.2	20	68.4	74.8	
25.64	35.0	49.9	67.8	25	68.2	73.3	
32.15	35.2	50.0	67.7	30	68.1	71.7	
50.14	36.0	50.5	68.3	35	68.0	70.0	
64.91	37.3	51.8	69.3	40	67.9	68.5	
79.88	40.2	54.5	71.8	45	"	67.9	
93.28	44.6	58.7	75.4	50	"	68.2	
100	47.8	61.5	78.1	55	68.0	68.9	
Znaczyński, 1931				60	68.0	69.8	
p	0%	20.38%	32.38%	65	68.2	70.9	
		b. t.		70	68.4	72.1	
760	80.12	68.36	68.02	75	68.9	73.3	
1695	108.69	93.04	91.70	80	69.4	74.3	
2360	122.08	104.56	102.89	85	70.3	75.2	
3460	137.83	118.97	117.03	90	71.9	76.1	
4323	149.82	128.21	125.97	95	73.9	77.0	
5914	165.81	143.05	139.91	100	78.3	78.3	
6800	173.69	151.69	146.62				
p	51.30%	58.97%	100%	Swietoslawski and Kopczynski, 1931			
		b. t.		p	Dt	p	Dt
760	68.84	69.33	78.30	42.53%		38.82%	
1695	92.49	92.79	100.00	757	0.031	780	0.016
2360	103.25	103.60	110.00	835	0.028	1021	0.007
3460	116.75	116.87	122.33	1220	0.009	1142	0.004
4323	125.19	125.26	130.00	1468	0.005	1344	0.002
5914	138.04	137.75	141.57	1613	0.002	1558	0.000
6800	144.23	143.70	147.00	1793	0.000	1840	0.002
				p	Dt	p	Dt
				35.86%		33.78%	
				770	0.007	766	0.000
				920	0.005	854	0.000
				1155	0.000	948	0.002
				1334	0.003	1171	0.007
				1703	0.006	1536	0.012
				1850	0.010	1706	0.014
						1846	0.020

p 32.41%	Dt	p 29.98%	Dt
766	0.000	746	0.006
1150	0.012	889	0.011
1440	0.020	1221	0.022
1544	0.025	1623	0.038
1726	0.031	1848	0.043
1845	0.037		
Dt = Difference between boiling and dew point temperature			
Young, 1902			
%	b. t.		
0	80.2		
32.41	68.25	Az	
100	78.3		
Young and Fortey, 1902			
%	b. t.	d°	
31.26	-	0.8685	
32.36	68.24	Az	0.86740
100	78.30		
dp/dt (at b. t.) = 26.6			
Lecat, 1909			
%	b. t.		
0	80.2		
32.36	68.25	Az	
100	78.3		
Swietoslawski, 1932			
Az : b. t. = 67.93° (760 mm)			
Swietoslawski and Chojnacki, 1939			
%	P crit. (Kg/cm ²)	%	P crit. (Kg/cm ²)
100	65	40	62
90	64	30	61
80	63	20	59
70	62	10	55
60	62	0	51
50	63		
Tomassi, 1947			
%	C.V.T.	%	C.V.T.
100	245	79.59	245.8
98.4	245.3	62.20	248.5
96.47	245.1	49.30	251.8
94.9	245.3	31.4	262.9
93.35	245.2	4.75	287.4
86.95	245.7	0	293.1
Beckmann, 1888			
% Az	P (Kg/cm ²)		
63.4	13		
77.0	23		
85.6	33		
88.0	42		
90.4	55		
Beckmann, 1888			
f. t.	%	f. t.	%
5.44	0	3.220	5.49
5.265	0.16	2.715	8.13
4.960	0.49	1.995	12.76
4.565	1.08	1.260	18.42
4.080	2.24	0.440	24.50
3.735	3.36		
Paterno, 1889			
%	D f. t.	%	D f. t.
0.32	-0.33	6.26	-2.40
0.58	-0.545	7.84	-2.68
0.98	-0.79	10.74	-2.97
2.05	-1.32	14.12	-3.41
3.90	-1.90	18.03	-3.825
4.35	-2.01	18.77	-3.97

Pickering, 1893

%	f. t.	%	f. t.
0	5.44	55.569	-8.98
2.433	3.96	58.170	-10.45
4.994	3.22	60.244	-11.69
7.579	2.69	60.383	-12.23
10.021	2.29	62.999	-13.67
14.150	1.68	65.181	-15.90
14.150	1.66	67.876	-17.86
18.216	1.09	69.940	-20.97
21.651	0.68	73.169	-25.16
24.284	0.24	75.190	-29.36
27.240	-0.13	75.190	-29.21
30.085	-0.67	78.094	-34.01
32.898	-1.24	80.042	-37.01
35.522	-1.65	81.672	-41.31
36.145	-1.78	83.556	-42.76
37.740	-2.17	85.041	-47.51
40.173	-2.89	86.273	-49.26
41.013	-2.08	87.285	-54.26
43.108	-3.64	88.804	-57.16
45.166	-4.43	90.004	-59.51
48.347	-5.53	91.201	-65.86
50.235	-6.41	92.430	-71.01
53.097	-7.58	94.991	-82.5

Rosza, 1911

%	f. t.	%	f. t.
0	5.91	5.098	3.85
0.123	5.78	6.812	3.52
0.494	5.44	8.005	3.26
1.141	5.01	9.770	2.95
2.339	4.55	11.278	2.71
4.190	4.04	16.093	2.04

Viala, 1914 and Perrakis, 1925

%	f. t.	%	f. t.
0	0	+5.5	54.03
5.85	9.52	3.3	63.90
9.76	15.49	2.3	73.45
12.39	19.33	2.0	75.76
17.23	26.08	1.5	77.88
20.02	29.78	1.0	82.52
22.68	33.21	0.75	86.99
28.18	39.94	-0.25	91.39
33.20	45.72	-1.2	95.73
38.96	51.96	-2.3	97.87
44.13	57.19	-3.6	100
49.35	62.25	-5.4	100

Washburn, Hnizda and Vold, 1931

%	D f. t.	%	D f. t.
1.8	-1.1	46.4	-6.5
2.9	1.5	48.6	7.2
4.4	1.7	52.3	8.4
5.8	2.0	69.8	14.9
8.5	2.3	81.4	30.2
10.3	2.5	90.2	53.7
13.3	2.8	94.9	80.7
23.5	3.7	95.8	95.7
31.5	4.5	96.9	129.7
38.1	5.2		

Giacalone, 1942

%	D f. t.	%	D f. t.
0.321	-0.34	25.38	-4.74
0.907	0.80	27.81	5.10
1.61	1.15	30.33	5.48
2.29	1.39	32.34	5.79
3.11	1.63	34.21	6.06
4.19	1.89	37.69	6.80
5.36	2.14	41.36	7.63
7.27	2.47	44.19	8.36
9.58	2.83	46.81	9.16
11.75	3.14	58.16	15.89
13.80	3.39	65.15	21.34
15.98	3.66	73.18	30.60
18.03	3.90	78.10	39.45
19.80	4.09	83.87	48.20
22.48	4.40		

Leroude, 1936 - 1938

vol%	D	vol%	D
15°			
0	-	32	0.72
1	2.13	50	0.92
2	1.67	70	1.19
2.5	1.63	98	1.65
16	0.82	100	-

Johnson and Babb, 1956 (fig.)

mol%	D	
	benzene	ethyl alcohol
25°		
0	2.20	3.10
5	2.23	2.55
10	2.30	2.20
20	2.35	1.75
35	2.38	1.55
40	2.35	1.50
50	2.30	1.40
60	2.20	1.35
70	2.15	1.25
80	2.00	1.20
90	1.90	1.10
100	1.80	1.05

Properties of phases.

Densities.

Le Blanc, 1889

%	d
20°	
52.28	0.83511

Buchkremer, 1890

%	d	%	d
20°			
0	0.87953	0	0.88140
23.467	0.85744	20.904	0.86043
38.277	0.84414	47.141	0.83561
48.468	0.83558	78.876	0.81063
59.243	0.82689	100	0.79303
79.917	0.80980		
100	0.79350	(another sample)	

Jahn, 1891

%	d
20°	
100	0.79009
65.66	0.81871
0	0.87852

Paterno and Montemartini, 1894

%	d
16.88°	
0.0	0.88176
1.1760	0.88019
18.6146	0.86336
100.0	0.79535

Philip, 1897

%	d
16°	
0	0.8828
26.475	0.8581
49.159	0.8396
78.499	0.8168
100	0.8004

Kowalski and Modzelewski, 1901

%	d	%	d
18°			
0.0	0.88153	28.682	0.85398
0.343	0.88116	41.319	0.84304
2.296	0.87910	46.249	0.83887
3.337	0.87710	52.830	0.83335
5.527	0.87560	69.238	0.81964
12.117	0.86944	85.375	0.80623
13.242	0.86810	100.00	0.79405
17.960	0.86355		

Young and Fortey, 1902

%	d
0°	
31.26	0.8685
32.36	0.86740
dp/dt (at l.t.) = 26.6	

Ramsay and Aston, 1902

$\%$	d		
	10°	46.2°	78.2°
0	0.8897	0.8509	0.8165
6.1	0.8794	0.8446	0.8097
12.89	0.8761	0.8387	0.8045
20.17	0.8694	0.8325	0.7943
28.98	0.8620	0.8257	0.7921
37.14	0.8558	0.8181	0.7854
46.76	0.8453	0.8104	0.7773
57.88	0.8355	0.8017	0.7695
70.03	0.8254	0.7923	0.7609
74.51	0.8213	0.7883	0.7572
84.16	0.8143	0.7816	0.7509
94.99	0.8052	0.7735	0.7434
100	0.7935	0.7667	0.7363

Getman, 1906

t	d		
	25 vol%	50 vol%	75 vol%
15	0.8619	0.8414	0.8213
20	0.8571	0.8369	0.8170
25	0.8523	0.8324	0.8127
30	0.8475	0.8279	0.8084
35	0.8427	0.8229	0.8040
40	0.8378	0.8179	0.7995
63		0.7892	0.7823

Findlay, 1909

%	t	d
0	79.3	0.8150
1.30	74.8	0.8179
4.30	70.6	0.8191
6.90	69.2	0.8182
15.20	67.4	0.8123
22.4	66.9	0.8066
37.3	66.8	0.7950
47.4	67.1	0.7869
70.3	69.1	0.7680
88.0	72.7	0.7519
100	77.1	0.7390

Polowzow, 1910

M	d	M	d
20°			
0	0.878434	0.972	0.87280
0.34	0.87817	2.056	0.86670
0.068	0.87797	4.35	0.86290
0.102	0.87777	5.14	0.85173
0.170	0.87735	10.28	0.82620
0.660	0.87445	100	0.78970

Muchin, 1913

%	d	%	d
20°			
87.8	0.8016	99.47	0.7957
93.23	0.7995	99.61	0.7955
97.1	0.7978	99.66	0.7953
98.04	0.7976	100	0.7950

Mathews and Cook, 1914

t	d
50%	
0	0.8653
25	0.8404
40	0.8253
55	0.8093

Burwinkel, 1914

%	d
17°	
0.00	0.88089
17.871	0.86731
32.083	0.85602
45.121	0.84527
66.569	0.83143
84.532	0.81964
100	0.80933

Perrakis, 1925

mol%	d	mol%	d
20°			
0	0.8779	50.91	0.8450
7.75	0.8732	58.93	0.8391
12.86	0.8700	66.36	0.8326
16.28	0.8678	71.25	0.8284
19.86	0.8658	85.98	0.8141
24.72	0.8627	94.07	0.8054
35.63	0.8557	100	0.7982

Barbaudy, 1926

%	d	%	d
25°			
0	0.8736 ₃	60.00	0.8182 ₅
10.00	0.8629 ₃	70.00	0.8095 ₃
18.48	0.8550 ₃	79.99	0.8009 ₅
30.00	0.8447 ₄	89.87	0.7934 ₃
40.00	0.8357 ₄	100.00	0.7850 ₆
50.00	0.8264 ₉		

Hammick and Andrews, 1929

mol%	d
25°	
23.7	0.8578
42.1	0.8422
56.4	0.8304
75.8	0.8163
100	0.7898

Washburn and Lightbody, 1930

mol%	d	mol%	d
25°			
0	0.87276	82.0	0.80774
7.4	0.86776	89.6	0.79883
14.5	0.86335	93.2	0.79457
21.2	0.85880	96.7	0.79008
33.8	0.85062	100	0.78545
60.4	0.82922		

Springer and Roth, 1930

%	d
25°	
0	0.8691
3.14	0.8657
11.97	0.8569
54.40	0.8258
91.53	0.7916
100	0.788

Graffunder and Heymann, 1931

mol%	d
56.7°	
0	0.8392
14.45	0.8205
33.74	0.8170
50.42	0.8050
65.02	0.7927
89.66	0.7702
100	0.7576

Harms, 1938 - 1943

mol%	d	
	6°	
	30°	
0	0.89359	0.86800
0.601	0.89312	0.86751
0.834	0.89296	0.86734
1.225	0.89266	0.86704
1.896	0.89217	0.86658
4.485	0.89040	0.86481
10.096	0.88674	0.86120
16.437	0.88243	0.85701
24.595	0.87683	0.85168
36.910	0.86766	0.84303
49.066	0.85781	0.83381
64.268	0.84397	0.82083
74.111	0.83397	0.81145
88.689	0.81691	0.79544
96.137	0.80696	0.78606
97.032	0.80567	0.78486
98.319	0.80384	0.78313
100.000	0.80133	0.78078

Giacalone, 1942

M	d
27°	
3.24	0.8555
2.43	0.8595
1.62	0.8610
0.81	0.8655
0	0.8700

G.L.Starobinetz,K.S.Starobinetz and Rigikova, 1951

mol%	d	mol%	d
25°			
0.00	0.8733	59.87	0.8306
9.53	0.8675	69.77	0.8215
20.49	0.8613	80.23	0.8104
30.82	0.8545	89.93	0.7988
39.70	0.8482	100.00	0.7865
49.74	0.8400		

Guthrie, 1878

50 vol% 17.42° Dv = 0.02488%

Ritzel, 1907

P	π	P	π	P	π
0 mol%		24.94 mol%		50.23 mol%	
d = 0.870		d = 0.854		d = 0.838	
25°					
1	91.5	1	95.1	1	98.0
101	85.2	109	87.9	121	87.5
213	76.5	232.5	76.7	232.5	78.1
345.5	71.3	365.5	70.8	355	72.3
484.5	63.8			485	70.4

P	π	P	π
77.85 mol%		100 mol%	
d = 0.815		d = 0.790	
25°			
1	102.0	1	104.7
114	91.1	104.5	95.8
220.5	79.7	204.5	87.3
340	72.1	319	78.4
460	66.7	450	69.7

Viscosity and surface tension

Wijkander, 1878

%	10°	20°	η 30°	40°	50°
0	746	641	555	488	433
50	1008	832	694	586	503
100	1548	1258	1036	859	718

Getman, 1906

t	η	$\tau \cdot 10^5$	η	$\tau \cdot 10^5$
0 vol%		25 vol%		
15	704	-	717	-
20	649	11	657	12
25	606	9	624	7
30	562	9	571	11
35	527	7	538	7
40	492	7	500	7
50	437	6	-	-
60	391	5	-	-
63	-	-	-	-
70	351	4	-	-

t	η	$\tau \cdot 10^5$	η	$\tau \cdot 10^5$
50 vol%		75 vol%		
15	881	-	1100	-
20	810	17	1017	17
25	759	18	926	18
30	681	18	839	18
35	623	14	772	14
40	567	14	699	14
63	400	9	495	9

t	η	$\tau \cdot 10^5$
100 vol%		
15	1321	-
20	1192	26
25	1091	20
30	990	20
35	909	16
40	828	16
50	698	13
60	592	11
63	505	9

Dunstan, 1904

%	η	%	η
25°			
0	582.1	32.42	651.4
11.14	566.8	49.09	728.2
11.97	566.9	54.40	775.8
19.62	588.5	71.10	883.7
23.47	607.1	83.00	954.5
30.51	646.5	91.53	1013
		100	1130

Hirata, 1908

vol%	η
25°	
75	826.7
87.5	909.0
93.75	954.8
96.875	982.7
98.4375	995.5
99.21875	995.9

Findlay, 1909

%	t	η
0	79.3	317
1.30	74.8	327
4.30	70.6	334
6.90	69.2	336
15.20	67.4	341
22.4	66.9	344
37.3	66.8	361
47.4	67.1	377
70.3	69.1	416
88.0	72.7	438
100	77.1	442

Muchin, 1913

%	η	%	η
20°			
100	1295	98.64	1275
99.66	1288	98.04	1265
99.61	1288	97.1	1261
99.47	1289	87.8	1158

Mathews and Cook, 1914

t	η
50%	
0	1414
25	820.3
40	620.1
55	496.1

Springer and Roth, 1930

%	η	%	η
25°			
0	0.3950	54.40	0.4687
3.14	.3909	91.53	.6097
11.97	.3865	100	.6565
η (water at 0° = 1)			

Lemondé, 1936 and 1938

vol %	η	vol %	η
15°			
0	700	50	880
2	682	70	1050
16	650	98	1300
32	725	100	1310

Golik and Ravikovitch, 1950

t	$\eta \cdot 10^5$ in stokes	t	$\eta \cdot 10^5$ in stokes
0%		33.7%	
20.4	621	15.8	769
50.8	442	26.5	675
113.3	278	50.3	496
130.0	269	74.0	400
		94.3	336
		113	299
		124	279
		146	271
60.5%		82%	
22.4	863	21.1	1092
33.2	735	38.5	848
41.1	659	50.0	714
51.2	590	62.2	588
61.0	504	78.9	476
78.5	423	96.6	392
99.1	350	116.2	324
132.1	275	124.6	302
		131.7	286
100%			
20	1574		
50	1016		
110	413		
140	292		

Ramsay and Aston, 1902

%	σ		
	10.0°	46.2°	78.2°
0	29.36	24.67	20.68
6.1	28.15	23.88	20.09
12.89	27.48	23.36	19.72
20.17	26.97	22.94	19.38
28.98	26.49	22.57	19.17
37.14	25.99	22.23	18.86
46.76	25.48	21.82	18.56
57.88	24.95	21.44	18.32
70.03	24.32	20.98	17.97
74.51	24.08	20.79	17.82
84.16	23.60	20.46	17.60
94.99	23.05	20.05	17.27
100	22.81	19.78	17.07

Ritzel, 1907

mol%	σ
25°	
0	27.79
24.94	26.43
49.77	24.83
77.85	23.42
100	22.18

Morgan and Scarlett, 1917

%	σ	%	σ
25°		45°	
0	27.263	0	24.735
16.70	25.542	19.96	23.124
20.04	25.281	25.00	22.859
22.82	25.104	29.83	22.635
25.04	24.971	100	19.589
50.06	23.651		
75.04	22.402		
100	21.145		

Hammick and Andrews, 1929

mol%	σ
25°	
23.7	27.38
42.1	25.40
56.4	25.00
75.8	23.84
100	21.90

Trieschmann, 1935

mol%	σ
22°	
100	21.9 ₆
72.20	23.9 ₇
58.35	24.8 ₆
44.27	25.6 ₇
31.57	26.3 ₆
22.42	27.1 ₄
11.24	27.8 ₁
0	28.6 ₄

Giacalone, 1942

mol %	σ
27°	
3.24	26.35
2.43	26.65
1.62	27.02
0.81	27.40
0.00	27.95

Wolf, 1943

mol %	σ	mol %	σ
20°			
0	28.62	75	23.72
10	27.84	90	22.62
25	26.79	100	22.08
50	25.30		

G.L. and K.S. Starobinets and Rigikova, 1951

mol %	σ	mol %	σ
25°			
0.00	28.20	59.87	24.36
9.53	27.58	69.77	23.78
20.49	26.84	80.23	23.29
30.82	25.91	89.93	22.51
39.70	25.44	100.00	22.00
49.74	25.13		

Optical and electrical properties

Le Blanc, 1889

%	n_D
20°	
52.28	1.42370

Buchkremer, 1890

%	n_D
20°	
0	1.50047
20.904	1.46806
47.141	1.42808
78.876	1.38863
100	1.36196

Lehfeldt, 1898

%	n_D	%	n_D
18°			
0	1.5024	60	1.4146
10	1.4869	70	1.4011
20	1.4716	80	1.3878
30	1.4568	90	1.3749
40	1.4425	100	1.3622
50	1.4283		

de Kowalski and de Modzelewski, 1901

%	n_D	%	n_D
18°			
0.0	1.50165	28.682	1.45687
0.343	1.50061	41.319	1.43864
2.296	1.49760	46.249	1.43171
3.337	1.49560	52.830	1.42251
5.527	1.49237	69.238	1.40053
12.117	1.48234	85.375	1.38008
13.242	1.48000	100.000	1.36193

Barbaudy, 1926.				Linebarger, 1896			
%	n_D	%	n_D	%	ϵ		
25°				20°			
0	1.4979	40.00	1.4376	0	2.249		
5.89	1.4979	50.00	1.4239	24.309	2.810		
10.00	1.4817	60.00	1.4103	43.076	3.345		
10.09	1.4818	70.00	1.3962	71.424	3.884		
18.48	1.4691	89.87	1.3718	100	4.261		
		100.00	1.3592				
Ishikawa, 1930				Philip, 1897			
mol%	n_D			%	ϵ		
30°				16°			
0	1.49517			0	2.244		
71.0036	1.45118			12.705	3.583		
51.4118	1.42364			15.284	4.165		
31.1290	1.39664			26.475	6.813		
100	1.38174			49.159	13.09		
				78.499	21.30		
				100	27.1		
Campbell and Miller, 1947 (fig.)				Graffunder and Heymann, 1931			
%	n_C	%	n_C	mol%	ϵ		
25°				56.7°			
100	1.36	40	1.434	0	2.230		
90	1.37	30	1.448	14.45	2.882		
80	1.384	21	1.46	33.74	4.66		
72	1.394	10	1.478	50.42	7.30		
59	1.41	0	1.492	65.02	10.39		
49	1.425			89.66	17.08		
				100	20.27		
Brown and Smith, 1954				G.L.Starobinets, K.S.Starobinets and Rigikova, 1951			
mol%	n_D	mol%	n_D	mol%	ϵ	mol%	ϵ
25°				25°			
0	1.49803	59.84	1.42815	0.00	2.271	59.87	11.75
4.51	1.49401	69.40	1.42392	9.53	2.700	69.77	14.95
9.57	1.48885	80.59	1.39555	20.49	3.400	80.23	18.10
19.91	1.47790	90.52	1.37772	30.82	4.700	89.93	21.25
28.90	1.47667	94.87	1.36923	39.70	6.600	100.00	24.45
49.66	1.44219	100.	1.35929	49.74	8.850		

Jahn, 1891		Schüller, 1871	
%	α magn.	%	U
	20°	20.49	0.5022
100	84.77	24.45	0.5112
65.66	128.09	32.54	0.5268
0	223.92	48.74	0.5465
		57.85	0.5565
		66.89	0.5666
		80.15	0.5862
Scharf, 1932		Walker and Henderson, 1902	
vol%	(α) magn. 5893 Å in degrees	c	U
	16°	at room temperature	
0.0	4.885	80.96	0.528
9.1	4.594	123.87	0.511
20.0	4.248	210.99	0.497
30.0	3.937	483.21	0.460
40.0	3.637	1301.1	0.428
50.0	3.325	c = g. benzene in 1 mole alcohol.	
60.0	3.038	Timofeev, 1905	
69.7	2.732	%	U
80.0	2.438	0	0.4233
90.0	2.154	3.62	0.425
100	1.875	10.6	0.436
		17.35	0.449
		25.33	0.462
		79.9	0.556
		100	0.5933
Sette, 1950		Viala, 1914	
mol%	$a/b_2 \cdot 10^{17}$ (sec ² .cm ⁻¹)	mol%	U
0	854		15°
1	700	0	0.407
2.4	600	27.4	0.482
4.5	500	50.2	0.515
8	400	60.4	0.530
14.5	300	67.7	0.542
23	200	86.0	0.561
45	100	100	0.580
60	70		
80	57		
100	55		
a = amplitude of the absorption coefficient. b = frequency.		Perrakis, 1925	
Heat constants		mol%	U
Guthrie, 1878			20°
50 vol %	17.42° Q mix is negative.	0	0.409
		17.59	0.468
		29.77	0.487
		42.22	0.505
		52.29	0.518
		64.09	0.531
		71.78	0.541
		79.82	0.552
		87.55	0.563
		90.97	0.569
		100	0.574

Tyrer, 1912

%	Q vap (cal/g)	%	Q vap (cal/g)
750mm			
0	94.45	60	139.1
10	116.0	70	144.3
20	122.6	80	156.9
30	126.1	90	175.3
40	130.2	100	200.3
50	134.3		

Az : 31.8% 32.24° Q vap = 126.8

Walker and Henderson, 1902

c	Q mix	c	Q mix
at room temperature			
80.96	- 437	2627.1	- 2901
123.87	- 578	4457	- 3584
210.99	- 806	6721	- 3974
483.21	- 1255	13433	- 4032
1301.1			
c = g. benzene in 1 mole alcohol			

Wolf, Pahlke and Wehage, 1935 (fig.)

mol%	Q mix (mole alcohol)
20°	
0.1	-3700
1	3600
8	1750
10	1600
15	1200
25	840
50	330
75	120

Viala, 1914

mol%	Q mix	mol%	Q mix
16.0	-129	33.7	-136
17.9	133	37.5	133
19.0	133	43.2	125
20.2	136	47.7	120
23.3	129	54.9	102
30.4	140	88.0	30.3
at room temperature			

Brown and Fock, 1955

mol%	Q mix	mol%	Q mix
45.0°			
13.0	-250.2	63.9	-262.9
18.9	294.2	65.1	214.9
27.6	310.2	65.3	205.8
33.0	315.5	85.7	93.2
54.7	261.9	94.0	41.3
54.9	262.4		

Timofeev, 1905

initial	% final	Q dil (mole alcohol)
0	0.6	-3578
0.6	1.27	2829
1.27	1.98	2109
1.98	2.84	1563
0	5.8	-1635
5.8	10.4	586
10.4	14.6	390
14.6	18.4	344
		(mole benzene)
84.1	79.9	-385
87.8	84.1	382
91.7	87.8	381
95.6	91.7	369
100	95.6	361

Gibbons, 1917

initial	% final	Q dil (by mole alcohol)
10°		
1.14	0.57	-3277
2.30	1.14	2775
4.60	2.30	2098
9.20	4.60	1423
13.80	9.20	936
27.04	13.80	707
50.43	27.07	368
100.00	53.15	144
20°		
1.23	0.61	-2893
2.46	1.23	2797
6.16	2.46	2239
9.25	6.16	1399
18.56	9.25	1085
27.07	18.56	692.5
50.43	27.07	500
100.00	53.15	201
30°		
1.65	0.83	-3156
3.30	1.65	2671
6.61	3.30	2189
13.24	6.63	1619
26.46	13.26	1018
53.00	26.50	570
100.00	53.10	212.8

Benzene (C_6H_6) + Propyl alcohol (C_3H_8O)

Heterogeneous equilibria.

Schmidt, 1926

mol%	p			
	0°	10°	20°	30°
0	26.8	45.8	74.9	116.0
10	27.5	47.1	79.1	126.2
20	27.7	47.4	81.1	128.3
30	27.2	47.1	80.8	127.8
40	27.0	46.8	78.0	124.5
50	26.5	45.7	75.1	119.2
60	25.9	45.7	72.2	114.5
70	24.9	40.0	65.5	106.3
80	23.2	34.2	56.8	92.6
90	18.1	24.3	42.2	69.5
100	3.4	7.7	15.0	28.1

mol%	p			
	40°	50°	60°	70°
0	180.5	269.5	395	550
10	198	289	428	608
20	203	295	437	618
30	202	294	434	616
40	196	289	423	608
50	188	280	410	590
60	178.5	278	393	566
70	166	271	368	532
80	149	225	331	474
90	121	182	276	391
100	52.0	88.5	153	249

Lee, 1931

L	mol%	V	p	p ₁	p ₂
40°					
3.9	8.4	191.7	175.6	16.1	
18.0	14.6	196.0	167.4	28.6	
30.0	16.3	193.0	161.6	31.4	
49.2	18.7	183.5	149.2	34.3	
58.4	20.5	175.0	139.1	35.9	
64.0	21.5	168.4	132.2	36.2	
70.9	24.0	156.0	118.6	37.4	
79.1	29.4	134.2	95.0	39.6	
87.0	32.3	114.0	77	37	
90.1	41.6	102.0	59.6	42.4	
100	100	50.2	0.0	50.2	

Vieth, 1929

C.S.T. is lower than -3°

Ryland, 1899

%	b.t.	
0	79	-79.5
16.5	76	-77
100	95.7	(762mm) Az

Young and Fortey, 1902

%	b.t. (760mm)	
16.9	77.12	Az
100	97.19	
dp/dt (at b.t.) = 25.0mm		

Lecat, 1909

%	b.t.	
0	80.2	
16.9	77.1	Az
100	97.2	

Rabcewicz-Zubkowski, 1933

vol%	p	b.t.
Az		
4.5	-	0
12	146 mm.	35.5
21	760	76.5
45	10.5 atm.	160

Kolossowsky and Theodorowitch, 1935

%	b.t. (760mm)	
0	80.2	
-	77.15	Az
100	97.25	

Pickering, 1895

%	f. t.	%	f. t.
0	+ 5.44	47.577	- 5.13
5.569	+ 3.43	52.590	- 6.64
9.161	+ 2.49	57.650	- 8.51
13.806	+ 1.72	62.763	- 12.00
18.493	+ 1.06	67.925	- 15.86
23.226	+ 0.34	73.138	- 20.66
28.003	- 0.56	78.402	- 28.46
32.827	- 1.18	83.720	- 39.06
37.697	- 2.38	89.092	- 53.16
42.512	- 3.33	92.342	- 74.16

Vieth, 1929

%	f. t.
66.3	-9
54.6	4.4
51.6	3.6
46.4	2.3
40.6	1.2
35.3	-0.3
28.2	+0.8

Lee, 1931

mol%	D f. t.
0.7	-0.269
3.5	1.007
8.0	1.711
13.7	2.376
19.8	3.029

Giaccalone, 1942

%	D f. t.	%	D f. t.
0.340	-0.266	31.78	-6.457
0.818	0.614	34.68	6.979
1.61	1.008	37.94	7.668
2.82	1.442	41.10	8.387
4.33	1.838	43.89	9.228
5.87	2.196	46.80	10.178
7.51	2.529	48.59	10.657
9.58	2.915	53.31	12.687
12.07	3.338	54.63	13.178
14.66	3.743	57.68	13.95
16.84	4.058	62.75	17.44
19.12	4.400	67.93	21.30
21.65	4.770	72.69	26.10
23.69	5.102	78.40	33.90
26.60	5.538	85.21	44.50
29.15	5.978	89.15	58.60

Properties of phases.

Lange, 1925

%	d
24°	
0	0.874
3.15	0.871
5.17	0.870
9.46	0.866
15.51	0.857
22.09	0.855
33.90	0.846
100	0.802

41°	
0	0.856
3.19	0.852
5.20	0.850
9.50	0.846
15.41	0.840
34.00	0.825
100	0.790

70°	
0	0.828
3.30	0.826
5.21	0.825
9.52	0.822
15.52	0.818
22.15	0.814
34.20	0.807
100	0.771

Springer and Roth, 1930

%	d
25°	
0	0.8691
33.1	0.8420
40.22	0.8352
49.99	0.8330
100	0.8007

Rabcewicz-Zubkowski, 1933

%	d	%	d
20°			
0	0.8784	40	0.8450
2	0.8774	45	0.8447
5	0.8751	55	0.8376
10	0.8711	70	0.8263
15	0.8670	80	0.8187
20	0.8631	90	0.8114
25	0.8592	95	0.8077
30	0.8560	100	0.8032
35	0.8520		

Spells, 1936

%	d	%	d
22°			
0	0.87661	3.387	0.87325
1.001	0.87565	4.762	0.87204
0.997	0.87565	8.007	0.86920
1.990	0.87460	20.05	0.85933
1.997	0.87460	50.12	0.83706
2.003	0.87460	89.90	0.80947
2.710	0.87390	100	0.80247

Harms, 1943

mol%	d
22°	
0	0.87657
16.521	0.86466
32.026	0.85410
46.798	0.84387
60.824	0.83377
74.340	0.82353
86.791	0.81340
94.381	0.80699
100.000	0.80201

G.L. and K.S. Starobinets and Rigikova, 1951

mol%	d	mol%	d
25°			
0.00	0.8733	59.83	0.8335
10.12	0.8665	69.82	0.8259
19.49	0.8607	79.84	0.8176
29.93	0.8527	89.78	0.8103
39.70	0.8464	100.00	0.8019
49.77	0.8409		

Schmidt, 1926

%	Dv. 10 ⁴	%	Dv. 10 ⁴
17°			
10	15	60	58
20	26	70	63
30	34	80	61
40	43	100	30
50	52		

Dunstan, 1908 - 1910

%	η
25°	
100.00	1962
66.90	1167
59.78	702.8
10.01	598.9
4.93	591.7
0.00	597.8

Springer and Roth, 1930

%	η
(water at 0° = 1)	
0	0.3950
33.1	0.4578
40.22	0.394
49.99	0.565
100	1.1408

Spells, 1936

%	η	%	η
22°			
0	428	3.387	619.32
1.001	623.40	4.762	620.40
0.997	623.13	8.007	626.53
1.990	620.25	20.05	675.81
1.997	620.27	50.12	977.83
2.003	620.25	89.90	1397.6
2.710	619.34	100	2119.8

Drown, 1932 (fig.)

%	σ	%	σ
20°			
0	28.89	60	25.40
10	28.00	70	24.95
20	27.33	80	24.60
30	26.65	90	24.18
40	26.25	100	23.78
50	25.65		

G.L.Starobinetz,K.S.Starobinetz and Rigikova, 1951

mol%	σ	mol%	σ
25°			
0.00	28.20	59.83	25.11
10.12	27.57	69.82	24.75
19.49	27.01	79.84	24.40
29.93	26.34	89.78	23.88
39.70	25.83	100.00	23.05
49.77	25.52		

Ishikawa, 1930

mol%	n_D
30°	
0	1.49517
29.3754	1.45828
49.0197	1.43575
69.2223	1.41380
100.00	1.38174

Philip, 1897

%	ϵ
16°	
0	2.244
18.653	3.735
31.442	5.962
47.793	9.58
64.631	14.25

Lange, 1925

%	ϵ
24°	
0	2.261
3.15	2.412
5.17	2.540
9.46	2.830
15.51	3.381
22.09	4.295
33.90	2.860
100	22.15
41°	
0	2.230
3.19	2.362
5.20	2.469
9.50	2.740
15.41	3.178
34.50	5.251
100	18.12

70°

0	2.185
3.30	2.300
5.21	2.382
9.52	2.593
15.52	2.931
22.15	3.482
34.20	4.631
100	12.39

Romanow and Eltzin, 1937

%	ϵ	(w.l. = 57.75 cm)
0	2.27	
5	2.38	
10	2.51	(w.l. = 91 cm)
25	3.19	
75	3.73	

G.L. and K.S. Starobinetz and Rigikova, 1951

mol %	ϵ
25°	
0.00	2.271
10.12	2.823
19.49	3.602
29.93	4.800
39.70	6.000
49.77	8.080
59.83	10.30
69.82	12.76
79.84	15.64
89.78	18.08
100.00	20.74

Girard and Abadie, 1939 (fig.)

w.l.	dispersion	absorption
3.5	0.09	0.14
7	0.13	0.29
10	0.19	0.34
20	0.33	0.40
30	0.50	0.39
50	0.73	0.36
70	0.84	0.32
100	0.92	0.26
200	0.98	0.12
500	0.99	0.07
dispersion = (ϵ' - ϵ_0) (ϵ_1 - ϵ_0)		
absorption = $\epsilon'' / (\epsilon_1 - \epsilon_0)$		

Heat constants.

Timofeev, 1905

%	U
20°	
0	0.4233
13.1	0.475
79.5	0.570
100	0.579

Kolosowsky and Theodorowitch, 1935

Q vap Az = 104.00 cal/g

Timofeev, 1905

initial %	final %	Q dil (mole/alcohol)
0	1.8	-3011
1.8	5.6	1385
5.6	9.4	817
9.4	13.1	610
(mole/benzene)		
100	95.3	-542
95.3	90.0	546
90.0	86.5	533
86.5	82.5	531
82.5	79.3	522

Schmidt, 1926

%	Q mix	%	Q mix (cal/g)
17°			
100	-0.66	40	-3.16
80	1.32	30	3.24
70	1.98	20	3.02
60	2.65	10	2.46
50	2.93		
Wolf, Pahlke and Wehage, 1935 (fig.)			
moll%	Q mix (mole alcohol)		
20°			
0.1	-3900		
1	3600		
10	1800		
25	920		
50	400		
75	160		

Benzene (C_6H_6) + Isopropyl alcohol (C_3H_8O)Heterogeneous equilibria.

Olsen and Washburn, 1937

mol%		P	P ₁	P ₂
L	V			
25°				
0.0	0.0	-	-	-
5.9	12.6	12.9	91.7	104.5
14.6	20.5	22.4	86.7	109.0
36.2	25.5	27.6	80.8	108.4
52.1	28.8	30.5	75.3	105.8
70.0	36.5	36.4	63.4	99.8
83.6	47.0	39.5	44.5	84.0
92.4	63.5	42.2	24.2	66.4
100.0	100.0	-	-	-

mol%		mol%	
L	V	L	V
25°			
0.0	0.0	63.3	33.4
11.4	18.7	82.0	45.0
17.3	22.3	86.1	50.8
22.4	23.1	91.0	59.8
33.0	24.6	94.8	73.9
43.0	27.0	100.0	100.0
53.6	29.0		

Storonkin and Morachevskii, 1956

mol%		P	b. t.
L	V		
20.0	26.0	243.5	42.38
	28.5	418.6	55.91
	30.0	600.5	65.75
	31.5	782.1	73.56
40.0	32.3	254.6	43.40
	35.7	412.0	55.37
	38.4	600.8	65.30
	40.2	781.8	72.72
60.0	37.7	258.7	44.95
	42.0	416.5	56.50
	46.5	601.6	66.20
	48.1	781.7	73.35
80.0	48.2	166.5	38.77
	55.6	321.9	53.51
	61.0	596.6	68.61
	62.4	781.6	75.85

Brown, Fock and Smith, 1956

L	mol %	V	p
45.00°			
4.72		14.67	252.50
9.80		20.66	264.13
20.47		26.63	272.06
29.60		29.53	273.40
38.62		32.11	272.22
47.63		34.63	269.49
55.04		36.92	264.92
61.98		39.51	259.35
70.96		43.78	247.70
80.73		51.07	227.14
91.20		66.58	189.28
96.55		82.52	159.80
100		-	136.05

Ryland, 1899

%	b. t.
0	79 - 79.5
30	71 - 72 Az (758 nm)

Young and Fortey, 1902

%	b. t. (760 nm)
33.3	71.92 Az
100	82.44

dp/dt (at b. t.) = 26.6 mm

Lecat, 1949

%	b. t.
0	80.2
33.3	71.9 Az
100	82.45

de Kolossowsky and Alimow, 1935

%	b. t. (760 nm)
0	80.2
-	71.95 Az
100	82.35

Kreglewski, 1955

wt%	mol%	C.V.T.
0	0	288.80
25.0	30.2	267.50
56.1	62.4	249.00
77.0	81.3	240.90
93.7	95.1	236.70
100	100	235.35

Perrakis, 1925

mol%	f.t.	mol%	f.t.
0	+ 5.4	65.12	- 7.8
4.46	4.2	68.96	10.1
5.62	3.8	74.00	12.6
15.51	2.3	79.14	17.5
21.29	1.65	83.91	22.7
32.01	+0.7	87.90	30
37.80	-0.2	90.88	37
43.00	1.0	94.49	46
47.41	1.75	96.72	63
50.99	3.0	97.29	79
55.20	3.9	100	- 86
61.08	- 6.0		

Olsen and Washburn, 1935

%	D f.t.	%	D f.t.
0.786	-0.622	8.952	-3.075
2.013	1.214	12.94	3.903
2.530	1.358	14.49	4.141
3.772	1.740	17.40	4.655
7.451	2.639	19.77	5.225

Properties of phases.

Perrakis, 1925

mol%	d	mol%	d
20°			
0	0.8778	53.84	0.8402
6.81	0.8731	63.67	0.8330
17.08	0.8658	74.48	0.8247
21.18	0.8631	82.30	0.8184
25.93	0.8596	89.20	0.8127
37.66	0.8517	100	0.8027
45.93	0.8459		

Mahanti, 1929

mol%	d
25°	
0.00	0.872
7.91	0.864
14.72	0.857
16.98	0.854
21.17	0.851
24.76	0.848
32.72	0.842
100	0.789

Washburn and Lightbody, 1930

mol%	d
25°	
0	0.87284
15.9	0.86709
11.5	0.86201
17.2	0.85720
28.1	0.84797
54.0	0.82646
77.9	0.80661
86.9	0.79898
91.3	0.79513
95.7	0.79119
100	0.78742

Poltz, 1936

mol%	d
22°	
0	0.8767
20.604	0.8572
33.008	0.8462
45.160	0.8356
56.917	0.8251
68.519	0.8146
79.285	0.8046
89.792	0.7946
100	0.7840

Olsen and Washburn, 1938

%	d	%	d
25.00°			
0.00	0.8737	57.53	0.8156
8.99	0.8625	67.90	0.8069
18.36	0.8520	78.69	0.7982
27.33	0.8441	89.22	0.7895
37.42	0.8333	100.00	0.7808
47.06	0.8248		

%	η	%	η
25.00°			
0.00	604.2	57.53	893.6
8.99	598.2	67.90	1067
18.36	605.7	78.69	1300
27.33	647.6	89.22	1592
37.42	704.2	100.00	2083.3
47.00	780.0		
Ishikawa, 1930			
mol %	n_D	mol %	n_D
30°			
0.0000	1.49517	68.8145	1.40709
28.9226	1.45468	100.0000	1.37355
48.1970	1.43084		
Poltz, 1936			
mol%	n		
	5893 Å	5000 Å	4500 Å
22°			
0	1.5003	1.5101	1.5187
20.604	1.4760	1.4845	1.4922
33.008	1.4613	1.4691	1.4760
45.160	1.4466	1.4537	1.4601
56.917	1.4324	1.4388	1.4445
68.519	1.4180	1.4238	1.4287
79.285	1.4044	1.4093	1.4138
89.792	1.3907	1.3951	1.3987
100	1.3769	1.3806	1.3838
Olsen and Washburn, 1937			
mol %	n_D	mol %	n_D
25°			
0.0	1.49800	53.6	1.43444
22.2	1.47159	64.0	1.42162
33.0	1.45954	82.3	1.39861
43.0	1.44725	100.0	1.37479
Joffe and Morachevskii, 1955			
mol%	n_D	mol%	n_D
20°			
0	1.5011	33.88	1.4608
9.05	1.4901	38.97	1.4548
13.08	1.4852	40.00	1.4536
17.35	1.4802	50.00	1.4412
20.00	1.4770	60.00	1.4291
26.00	1.4699	80.00	1.4040
29.78	1.4655	100	1.3773

Brown, Fock and Smith, 1956.			
mol %	n_D	mol %	n_D
25.00°			
0	1.49799	49.80	1.43899
5.28	1.49150	50.17	1.43853
10.67	1.48511	59.83	1.42681
20.87	1.47317	71.31	1.41256
30.57	1.46182	80.53	1.40083
39.31	1.451499	90.33	1.38805
48.98	1.43997	94.94	1.38189
49.32	1.43952	100	1.37503
Mahanti, 1929			
mol %	ϵ	mol %	ϵ
25°			
0.00	2.26	21.17	3.01
7.91	2.58	24.76	3.16
14.72	2.89	32.72	3.46
16.98	3.01	100	4.06
Poltz, 1936			
mol%	$(\alpha)_{\text{magn.}}^{\text{mol}}$ (in min.)		
	5893 Å	5000 Å	4500 Å
22°			
0	2.661	3.941	5.128
20.604	2.293	3.372	4.381
33.008	2.070	3.041	3.943
45.160	1.863	2.721	3.520
56.917	1.660	2.420	3.120
68.519	1.464	2.124	2.726
79.285	1.283	1.860	2.375
89.792	1.111	1.594	2.027
100	0.945	1.342	1.695
mol%	$(\alpha)_{\text{magn.}}^{\text{mol}}$ (in min.)		
	4000 Å	3500 Å	3000 Å
22°			
0	7.033	10.40	17.81
20.604	5.984	8.810	14.85
33.008	5.368	7.862	13.17
45.160	4.774	6.042	11.47
56.917	4.207	6.083	9.924
68.519	3.659	5.243	8.394
79.285	3.158	4.469	7.013
89.792	2.678	3.747	5.714
100	2.216	3.031	4.458

Heat constants			
de Kolossowsky and Alimow, 1935			
Q vap	Az = 118.33 cal/g		
Wolf, Pahlke and Wehage, 1935 (fig.)			
mol %	Q mix	mol %	Q mix
	(mole alcohol)		(mole alcohol)
20°			
0.1	-4200	25	-1160
1	-4000	50	-600
10	-2000	75	-250
Brown, Fock and Smith, 1956			
mol %	Q mix	mol %	Q mix
45°			
11.8	277.96	49.5	403.19
13.1	289.91	49.9	391.48
23.3	370.93	57.1	369.97
28.4	392.24	58.1	363.52
49.0	395.54	81.6	207.07
Benzene (C ₆ H ₆) + Butyl alcohol (C ₄ H ₁₀ O)			
Allen, Lingo and Felsing, 1939			
mol %	p	p	p
25.0°			
0.0	94.4	94.4	-
20.0	89.4	85.3	4.0
32.2	84.9	80.7	5.1
50.0	77.8	72.4	5.5
65.0	67.3	61.9	5.5
80.3	50.5	45.8	5.8
100.0	6.4	-	6.4
mol %		mol %	
L	V	L	V
25°			
19.7	4.5	65.0	8.1
31.3	5.9	79.8	11.3
50.0	7.0		
Perrakis, 1925			
mol %	f.t.	mol %	f.t.
0.00	+5.4	42.45	-2.0
3.40	+4.1	50.12	-3.8
15.29	+1.75	54.54	-4.75
15.25	+0.55	58.00	-6.1
18.97	+1.0	62.72	-8.9
31.44	-0.1	66.33	-11.0
38.99	-1.25	71.83	-15.3

Giacalone, 1942					
%	D f.t.	%	D f.t.	%	D f.t.
0.518	-0.37	23.13	-5.03	53.18	-12.64
1.215	0.75	27.40	5.76	54.99	13.41
2.07	1.08	31.22	6.44	56.62	14.24
3.07	1.39	34.53	7.11	57.97	14.70
4.69	1.78	37.47	7.71	65.19	16.40
7.03	2.26	40.26	8.40	70.07	20.80
10.10	2.82	43.67	9.24	79.05	28.70
13.52	3.41	46.89	10.14	83.88	36.40
18.55	4.22	48.80	10.75	90.73	52.40
Perrakis, 1925					
mol %	d	mol %	d	mol %	d
20°					
0	0.8778	21.94	0.8609	49.87	0.8424
4.96	.8739	29.86	.8554	64.42	.8336
8.83	.8705	30.59	.8550	80.94	.8233
14.14	.8665	36.86	.8507	89.94	.8176
15.14	.8652	41.90	.8476	100	.8108
Lange, 1925					
%	d	%	d	%	d
20°					
0	0.878	15.61	0.868	45.72	0.846
4.48	0.877	25.18	0.821	100	0.821
9.97	0.873	33.38	0.854		
Smyth and Stoops, 1929					
t	d				
	0 mol %	2.11 mol %	5.78 mol %		
10	0.8899	0.8875	0.8843		
20	.8791	.8768	.8738		
30	.8682	.8661	.8632		
40	.8574	.8553	.8528		
50	.8466	.8447	.8421		
60	.8358	.8338	.8311		
70	.8250	.8231	.8203		
	7.98 mol %	11.17 mol %	25.25 mol %		
10	0.8824	0.8801	0.8693		
20	.8719	.8695	.8591		
30	.8615	.8591	.8489		
40	.8512	.8489	.8388		
50	.8403	.8378	.8284		
60	.8296	.8270	.8180		
70	.8188	.8162	.8076		
	48.39 mol %	73.85 mol %			
10	0.8523	0.8354			
20	.8430	.8269			
30	.8334	.8182			
40	.8240	.8095			
50	.8142	.8007			
60	.8048	.7917			
70	.7948	.7826			

Giacalone, 1942			
M	d	M	d
27.5°			
3.39	0.8498	0.85	0.8637
2.54	0.8525	0	0.8700
1.69	0.8586		
Harms, 1943			
mol %	d	mol %	d
22°			
0	0.87643	30.016	0.85355
4.546	0.87248	40.219	0.84657
8.027	0.86970	59.988	0.83360
11.969	0.86665	79.510	0.82115
17.921	0.86220	90.011	0.81446
21.578	0.85953	100.000	0.80807
25.788	0.85653		
Jones, Bowden and al., 1948			
%	d	%	d
25°			
0	0.8731	40	0.8433
5	0.8689	50	0.8367
10	0.8650	60	0.8304
15	0.8610	80	0.8180
20	0.8570	100	0.8064
G.L. and K.S. Starobinetz and Rigikova, 1951			
mol%	d	mol%	d
25°			
0.00	0.8733	60.01	0.8319
10.16	0.8663	69.68	0.8272
20.05	0.8587	79.48	0.8206
29.74	0.8529	89.75	0.8134
39.65	0.8450	100.00	0.8072
50.57	0.8381		
Jones, Bowden and al., 1948			
%	η	%	η
25°			
0	603	40	842
5	604	50	1006
10	620	60	1178
15	640	80	1684
20	664	100	2587
Trieschmann, 1935			
mol %	σ	mol %	σ
22°			
0	28.6 _h	38.37	26.5 ₅
7.36	28.1 ₂	55.71	25.8 ₁
14.34	27.7 ₉	100	24.3 ₁
24.44	27.2 ₆		
Giacalone, 1942			
M	σ	M	σ
27.5°			
3.39	26.62	0.85	27.45
2.54	26.80	0	27.95
1.69	27.05		
Wolf, 1943			
mol %	σ	mol %	σ
20°			
0	28.82	75	25.11
10	27.25	80	24.60
25	27.25	100	24.30
50	26.00		
G.L. and K.S. Starobinetz and Rigikova, 1951			
mol %	σ	mol %	σ
0.00	28.20	60.01	25.22
10.16	27.37	69.68	24.80
20.05	26.80	79.48	24.50
29.74	26.34	89.75	24.29
39.65	25.86	100.00	23.60
50.57	25.52		
Ishikawa, 1930			
mol %	n_D	mol %	n_D
30°			
0.0000	1.49517	70.1595	1.42230
29.3922	1.46226	86.3470	1.40758
49.1946	1.44227	100.0000	1.39548

Allen, Lingo and Felsing, 1939.

mol%	n_D
0.0	25° 1.4980
29.7	1.4927
34.3	1.4910
50.0	1.4897
65.0	1.4886
79.8	1.4850
100.0	1.3974

Shakhparonov and Shlenkina, 1954

mol%	n_D°	D (19-20°)	I
0	1.50013	0.433	2.95
20	1.47434	0.318	3.20
35	1.46420	0.243	3.49
49	1.44862	0.218	3.11
65	1.43265	0.223	2.16
80	1.41746	0.209	1.59
100	1.39914	0.110	0.73

D - degree of the optical depolarisation.

I - relative intensity of the molecular light dispersion.

Lange, 1925

%	ϵ	%	ϵ
20°			
0	2.270	25.18	3.979
4.48	2.452	33.38	5.022
9.97	2.703	45.72	6.701
15.61	3.071	100	19.2

Smyth and Stoops, 1929

t	ϵ		
0	2.11	5.78	7.98
mol%			
10	2.315	2.400	2.548
20	2.294	2.378	2.526
30	2.274	2.354	2.502
40	2.253	2.330	2.473
50	2.231	2.364	2.438
60	2.209	2.274	2.401
70	2.186	2.243	2.355

t	ϵ		
11.17	25.25	48.39	73.85
mol%			
10	2.835	4.066	8.29
20	2.797	3.833	7.58
30	2.756	3.747	6.94
40	2.713	3.604	6.37
50	2.665	3.472	5.96
60	2.612	3.350	5.43
70	2.555	3.238	5.03

G.L.Starobinetz, K.S.Starobinetz and Rigikova, 1951

mol%	ϵ	mol%	ϵ
25°			
0.00	2.271	60.01	9.054
10.16	2.545	69.68	11.14
20.05	3.328	79.48	13.30
29.74	4.256	89.75	15.58
39.65	5.652	100.00	17.38
50.57	7.376		

Heat constants.

Perrakis, 1925

mol%	U	mol%	U
20°			
0	0.409	55.15	0.522
8.32	0.453	66.41	0.533
21.41	0.480	73.14	0.543
31.24	0.495	88.08	0.554
40.52	0.506	100	0.558

Wolf, Pahlke and Wehage, 1935 (fig.)

mol%	Q mix (mole alcohol)
20°	
0.1	-3950
1	3700
10	1800
25	960
50	440
75	150

Benzene (C_6H_6) + Isobutyl alcohol ($C_4H_{10}O$)

Allen, Lingo and Felsing, 1939

mol%		P	P ₁	P ₂
L	V			
25.0°				
0.0	0.0	94.4	94.4	-
20.2	7.2	93.2	86.4	6.7
34.3	8.7	89.3	81.5	7.8
49.8	9.9	83.7	75.4	8.3
64.0	12.8	75.3	65.7	9.6
80.5	18.7	56.8	46.2	10.6
100.0	100.0	12.6	-	12.6

Kreglewski, 1955

wt%	mol%	C.V.T.
100	100	276.25
93.1	93.5	276.00
78.6	79.5	275.30
62.9	64.1	275.30
20.0	20.8	281.85
6.9	7.2	286.45
0	0	288.80
min.: 72 wt%		275.10

Young and Fortey, 1902

%	b.t. (760mm)
9.3	79.84 Az
100	108.06
dp/dt (at b.t.) = 24.0 mm	

de Kolossowsky and Theodorowitch, 1935

%	b.t.
0	80.2
-	79.8 Az
100	107.85

Lecat, 1949

%	b.t.	Dt mix
0	80.15	
9.3	79.8 Az	
50	-	-6.3
100	108.0	

Rabcewicz-Zubkowski, 1933

Az	%	P	t
	45.6	15	15.5
	56.6	-	20
	62.5	-	34.5
	67.6	760	90
	69.1	6.33 atm.	148

Lange, 1925

%	d
20°	
0	0.878
5.21	0.875
10.64	0.869
20.01	0.861
35.42	0.854
100	0.806

Mahanti, 1929

mol%	d
25°	
0.00	0.872
3.06	0.868
9.48	0.864
15.30	0.860
19.22	0.855
23.17	0.853
28.72	0.849
100	0.806

Harms, 1943

mol%	d	mol%	d
22°			
0.000	0.87636	41.868	0.84151
3.363	0.87305	47.751	0.83715
6.955	0.86972	61.976	0.82684
10.769	0.86643	78.763	0.81503
15.815	0.86213	91.184	0.80646
25.315	0.85422	100.000	0.79983
35.013	0.84572		

Ishikawa, 1930

mol%	n_D
30°	
0.0000	1.49517
29.1308	1.46116
48.8239	1.44026
69.1479	1.42025
100.0000	1.39163

Allen, Lingo and Felsing, 1939

mol%	n_D
25°	
0.0	1.4980
20.0	1.4892
34.3	1.4874
49.8	1.4848
60.4	1.4827
80.5	1.4759
100.0	1.3936

Lange, 1925

mol%	ϵ
20°	
0	2.270
5.21	2.494
10.64	2.742
20.01	3.410
35.42	5.083
100	20.2

Mahanti, 1929

mol%	ϵ
25°	
0.0	2.26
3.06	2.38
9.48	2.42
15.30	2.62
19.22	3.16
23.17	3.38
28.72	3.81
100	-

Romanov and Eltzin, 1937

%	ϵ
75	8.70
25	3.52
10	2.54
0	2.27

Timofeev, 1905

initial	% final	Q dil (mole benzene)
100	93.5	-760
93.5	89.2	-753
89.2	85.0	-711
85.0	80.1	-711

%	U
20°	
0	0.4233
18	0.505
82.3	0.571
100	0.579

de Kolossowsky and Theodorowitch, 1935

Q vap Az = 93.65 cal/g.

Benzene (C_6H_6) + Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.	Dt mix
0	80.15	-
16	-	-4.1
17	78.55 Az	-
100	99.5	-

Pahlavouni, 1927

mol %		mol %	
L	V	L	V
at b. t.			
9.8	11.6	65.4	41.4
11.4	12.8	71.2	46.5
15.2	15.2	81.5	56.9
30.0	21.1	84.2	62.2
46.3	28.7	88.3	70.4
51.0	30.9	91.6	78.1
53.9	33.3	95.7	88.7
Az : 15.15 mol % 79°			

Allen, Lingo and Felsing, 1939

mol %		P	P ₁	P ₂
L	V			
25.0°				
0.0	0.0	94.4	94.4	-
9.5	-	96.4	-	-
19.7	11.2	95.1	84.5	10.7
35.3	13.3	91.0	78.9	12.1
50.0	15.0	85.4	72.5	12.8
64.6	18.5	76.9	62.7	14.2
79.7	26.2	60.7	44.8	15.9
100.0	-	18.4	-	18.4

Veltmans, 1926

%	d	%	d
20°			
0	0.8790	59.9	0.8317
20	.8616	79.5	.8193
39.6	.8450	100	.8069

Pahlavouni, 1927

mol %	n_D	mol %	n_D
20.0°			
0.00	1.50128	64.33	1.43140
12.12	.48657	72.44	.42366
18.02	.47980	89.39	.40768
34.53	.46178	100.00	.39780
41.94	.45380		

Allen, Lingo and Felsing, 1939

mol%	n_D
25°	
0.0	1.4980
19.7	1.4845
35.3	1.4821
50.0	1.4796
64.6	1.4756
79.7	1.4669
100.0	1.3946

Veltmans, 1926

mol%	(α) _D
20°	
0	0
20	2.86
39.6	5.63
59.9	8.35
79.5	10.79
100	13.87

Benzene (C_6H_6) + tert. Butyl alcohol ($C_4H_{10}O$)

Allen, Lingo and Felsing, 1939

mol%		P	P ₁	P ₂
L	V			
25.0°				
0.0	0.0	94.4	94.4	
10.0	13.0	105.7	91.1	13.6
19.8	19.6	106.5	85.7	20.9
35.1	24.5	104.3	78.7	25.6
49.9	29.1	100.2	71.0	29.2
65.2	35.2	92.8	60.1	32.7
80.2	45.5	80.5	43.9	36.6
100.0	100.0	42.0	-	42.0

Young and Forney, 1902

%	b. t. (760 mm)
36.6	73.95 Az
100	82.55
dp/dt (at b. t.) = 26.0 mm	

Lecat, 1949		
%	b. t.	
0	80.15	
36.5	73.9 Az	
100	82.45	
Spells, 1936		
%	d	η
25°		
0	0.87341	602
0.998	0.87200	598.65
1.930	0.87060	596.58
2.570	0.86978	595.80
3.225	0.86885	595.45
4.162	0.86761	595.40
4.759	0.86683	595.39
5.979	0.86530	596.60
7.210	0.86370	598.00
8.000	0.86270	599.53
15.28	0.85465	620.08
23.76	0.84600	657.70
50.08	0.82095	886.03
89.80	0.79125	2578.9
100	0.78462	4190.5
Allen, Lingo and Felsing, 1939		
mol%	n _D	
25°		
0.0	1.4980	
10.0	1.4798	
19.8	1.4712	
35.1	1.4650	
49.9	1.4593	
65.2	1.4520	
80.2	1.4400	
100.0	1.3845	
Wolf, Pahlke and Wehage, 1935 (fig.)		
mol%	Q mix (mole alcohol)	
20°		
0.1	-3800	
1	3700	
10	1800	
25	1000	
50	480	
75	190	

Benzene (C ₆ H ₆) + Amyl alcohol (C ₅ H ₁₂ O) Giacalone, 1942			
%	D f. t.	%	D f. t.
0.339	-0.21	32.25	-6.77
0.861	0.49	36.79	7.90
1.71	0.85	40.66	8.78
3.40	1.34	43.56	9.67
5.99	1.92	46.47	10.50
9.09	2.52	51.56	12.45
12.75	3.15	54.02	13.60
16.71	3.82	55.76	14.44
20.45	4.48	58.05	15.12
25.27	5.38	60.13	16.63
27.91	5.87	61.84	17.68
Ishikawa, 1930			
mol%	n _D		
30°			
0.0000	1.49517		
28.3887	1.46653		
48.5606	1.44308		
68.2705	1.43135		
85.5892	1.41747		
100.0000	1.40640		
Jones, Bowden and al., 1948			
%	d	η	
25°			
0	0.8731	603	
5	0.8690	616	
10	0.8651	641	
15	0.8613	669	
20	0.8574	709	
40	0.8435	936	
50	0.8377	1132	
60	0.8312	1360	
80	0.8194	1963	
100	0.8083	3347	

Benzene (C_6H_6) + Isoamyl alcohol ($C_5H_{12}O$)

Burwinkel, 1914

t	p	t	p
100%			
10	1.2	80	103
20	2.3	90	162
30	5.0	100	247
40	10.0	110	372
50	20.1	120	539
60	38.8	130	744
70	65.1		

t	p					
	83.27%	69.27%	50.79%	28.71%	17.79%	0%
10	22.3	33.8	40	42.8	44.0	46.8
20	39.5	52.9	64.8	71.0	75.2	76.9
30	56.7	80.1	99.7	112	117	124
40	85.8	123	150	171	175	186
50	120	175	215	249	258	275
60	170	255	315	364	378	397
70	244	347	439	509	533	560
80	326	466	594	696	724	762

Kreglewski, 1955

wt%	mol%	C.V.T.
100	100	306.25
76.4	74.2	299.70
63.0	60.1	295.70
39.0	36.2	290.65
25.1	22.9	289.00
15.3	13.8	287.80
3.2	2.8	287.95
0	0	288.80

min. : 9 wt% 287.70

Young and Fortey, 1902

- No azeotrope

Burwinkel, 1914

%	d
17°	
100	0.81407
83.265	0.82440
69.266	0.83285
50.785	0.84474
28.706	0.85202
17.789	0.86901
0.000	0.88445

Lange, 1925

%	d
18°	
0	0.880
3.32	0.876
6.78	0.873
11.11	0.869
20.21	0.862
32.52	0.853
49.92	0.841
73.10	0.824
100	0.807
64°	
0	0.843
4.02	0.840
7.62	0.838
12.21	0.834
20.89	0.829
33.41	0.822
50.53	0.812
74.82	0.799
100	0.787

Mahanti, 1929

mol%	d
25°	
0.00	0.872
4.38	0.866
7.73	0.864
11.47	0.862
17.10	0.859
22.82	0.853
27.96	0.848
100	0.810

Spells, 1936

%	d	%	d
20°			
0	0.87875	20.44	0.86242
0.70	0.87805	23.51	0.86015
1.349	0.87750	26.47	0.85807
1.950	0.87695	32.93	0.85353
2.794	0.87620	43.05	0.84681
4.345	0.87490	49.00	0.84299
5.562	0.87390	66.55	0.83247
6.322	0.87323	80.20	0.82481
6.940	0.87275	90.10	0.81947
9.870	0.87040	100	0.81411
14.64	0.86670		

Muchin, 1913

%	d	η
18.4°		
0	0.8800	675.2
0.90	0.8800	675.1
1.69	0.8798	674.2
2.46	0.8792	680.6
3.52	0.8785	679.6
7.94	0.8754	695.0
11.19	0.8727	718.9
15.43	0.8686	754.4
26.00	0.8587	956.1
100 (18.7°)	0.8116	4716.9

Spells, 1936

%	η	%	η
20°			
0	647	20.44	732.13
0.70	645.03	23.51	757.23
1.349	644.60	26.47	783.34
1.950	644.33	32.98	855.04
2.794	644.52	43.05	1005.5
4.345	647.32	49.00	1114.7
5.562	650.54	66.55	1661.4
6.322	653.34	80.20	2437.8
6.940	655.01	90.10	3244.8
9.870	667.30	100	4375.7
14.64	693.46		

Ishikawa, 1930

mol%	n_D
30°	
0.0000	1.49517
29.2882	1.46484
49.1267	1.44628
69.5145	1.42864
100.0000	1.40405

Lange, 1925

p	ϵ
18°	
0	2.273
3.32	2.392
6.78	2.605
11.11	2.828
20.21	3.265
32.52	4.110
49.92	7.705
73.10	14.21
100	14.79
64°	
0	2.190
4.02	2.296
7.62	2.427
12.21	2.661
20.84	3.168
33.41	3.535
50.53	5.542
74.82	10.42
100	11.95

Mahanti, 1929

mol%	ϵ
25°	
0.00	2.26
4.38	2.44
7.73	2.57
11.47	2.72
17.10	2.78
22.82	3.24
27.96	3.24
100	3.44

Timofeev, 1905

%	U
20°	
0	0.4233
83.3	0.531
100	0.5542
%	Q dil (mole benzene)
initial	final
100	95.3
95.3	91.1
91.1	87.5
87.5	83.3
	-699
	697
	690
	682

Benzene (C_6H_6) + Amyl alcohol (essentially iso)
($C_5H_{12}O$)

Carnazzi, 1905

%	d	%	d
20°			
0	0.8773	53.48	0.8493
5.68	0.8739	82.18	0.8234
11.88	0.8714	93.48	0.8157
25.51	0.8638	100	0.8088

t	$\tau \cdot 10^6$			
	0%	5.68%	11.88%	25.51%
25	1214	1205	1198	1159
30	1230	1216	1204	1178
35	1243	1224	1215	1184
40	1255	1238	1226	1197
45	1258	1247	1240	1204
50	1285	1273	1253	1213

t	$\tau \cdot 10^6$			
	53.48%	82.18%	93.48%	100%
25	1088	976	941	923
30	1100	998	954	931
35	1115	1014	958	941
40	1125	1020	971	946
45	1129	1024	982	956
50	1145	1039	997	967

P	π			
	0 %	11.88 %	25.51 %	53.48 %
25°				
50	102	98	95	93
200	98	94	86	87
400	87	82	77	78
600	79	77	73	73
800	73	72	69	68

P	π			
	82.18 %	93.48 %	100 %	
25°				
50	91	89	87	
200	86	85	82	
400	79	78	77	
600	73	72	71	
800	69	68	66	

Philip, 1897

%	ϵ	%	ϵ
16°			
0	2.244	15.507	3.616
3.569	2.534	26.812	4.794
6.890	3.818	31.107	5.335
11.401	3.225		

Romanow and Eltzin, 1937

%	ϵ	%	ϵ
25°			
0	2.27	25	3.04
10	2.44	75	4.29

Benzene (C_6H_6) + Diethyl carbinol ($C_5H_{12}O$)

Spells, 1936

%	d	η	%	d	η
20°					
0	0.87875	647	9.640	0.86985	640.21
0.716	.87801	642.55	19.94	.86170	687.02
1.412	.87730	638.64	29.71	.85444	729.55
2.246	.87648	635.68	40.43	.84698	802.10
2.813	.87593	635.68	49.82	.84094	919.81
3.757	.87508	637.81	67.90	.83047	1375.0
3.872	.87500	641.69	79.60	.82456	2031.2
5.490	.87340	625.58	90.12	.81969	3041.7
7.220	.87194	631.84	100	.81546	4645.8

0	0.87875	647	3.155	0.87560	640.72
1.241	.87750	643.33	4.162	.87470	639.91
2.370	.87638	641.10	4.690	.87415	640.10
2.741	.87600	644.10	6.260	.87271	641.37

Benzene (C_6H_6) + tert.Amyl alcohol ($C_5H_{12}O$)

Lange, 1925

%	d	ϵ
24°		
0	0.874	2.261
3.10	0.871	2.350
5.15	0.869	2.400
10.21	0.865	2.531
35.18	0.844	3.180
50.22	0.836	3.579
100	0.809	5.849

Hassel and Naeshagen, 1932

mol%	ϵ
18°	
0	2.2951
7.951	2.3206
13.73	2.3383
20.22	2.3582

Benzene (C ₆ H ₆) + Hexanol (C ₆ H ₁₄ O)			
Giacalone, 1942			
%	D f.t.	%	D f.t.
0.487	-0.27	32.16	-6.12
1.322	0.65	36.71	7.12
3.01	1.14	42.00	8.40
5.37	1.63	45.36	9.35
8.32	2.14	47.69	10.00
12.80	2.84	54.18	12.50
16.50	3.41	56.16	13.46
20.95	4.12	59.03	14.82
25.10	4.82	63.03	16.75
28.77	5.50		

Wolf, 1943	
mol%	σ
20°	
0	28.62
10	28.05
25	27.52
50	26.70
75	26.40
90	26.30
100	26.25

Trieschmann, 1935	
mol%	σ
22°	
0	28.6 _u
11.13	28.2 ₃
18.71	27.7 ₃
41.02	26.9 ₀
60.00	26.5 ₉
100	26.2 ₃

Harms, 1943	
mol%	d
22°	
0.000	0.87630
2.802	0.87354
6.916	0.86992
10.156	0.86726
14.357	0.86384
30.153	0.85296
45.266	0.84464
59.055	0.83806
75.029	0.83129
91.674	0.82501
100.000	0.82208

Jones, Bowden and al., 1948	
%	d η
25°	
0	0.8731 603
5	0.8693 615
10	0.8654 633
15	0.8620 663
20	0.8587 709
40	0.8456 980
50	0.8396 1195
60	0.8338 1505
80	0.8230 2444
100	0.8124 4329

Wolf, Pahlke and Wehage, 1935 (fig.)	
mol%	Q mix (mole alcohol)
20°	
0.1	-4000
1	3800
10	1900
30	1000
50	400

Benzene (C ₆ H ₆) + 2-Methylpentanol (C ₆ H ₁₄ O)	
Harms, 1943	
mol%	d
22°	
0.000	0.87658
3.251	0.87310
7.136	0.86941
9.553	0.86724
14.837	0.86276
22.224	0.85705
29.796	0.85174
44.236	0.84291
59.894	0.83494
75.748	0.82817
90.691	0.82260
100.000	0.81941

Benzene (C_6H_6) + Octyl alcohol ($C_8H_{18}O$)

Biltz, 1899

%	D f. t.
17.04	-2.974
10.87	2.125
5.030	1.281
1.671	0.570
0.268	0.099

Benzene (C_6H_6) + 2-Octanol d ($C_8H_{18}O$)

Rule, Smith and Harrower, 1933

mol%	(α) ₅₄₆₁ ^{mol}	mol%	(α) ₅₄₆₁ ^{mol}
20°			
3.5	+19.3	34.6	15.46
7.2	18.2	36.3	15.52
11.9	17.2	38.8	15.40
17.0	16.65	43.6	15.44
24.4	16.12	53.2	15.20
26.6	15.97	64.7	15.09
29.2	15.87	78.9	15.13
30.8	15.71	100.0	15.24
33.1	15.62		

Benzene (C_6H_6) + 2-Octanol r ($C_8H_{18}O$)

Coppock and Goss, 1939

mol%	d	ϵ
20°		
0	0.8785	2.2813
1.387	0.8770	2.3308
2.420	0.8755	2.3670
2.938	0.8749	2.3867
3.294	0.8739	2.3977
7.302	0.8695	2.5305
15.966	0.8605	2.790
25.393	0.8526	3.068
36.130	0.8451	3.455
62.086	0.8319	4.815
100	0.8204	8.173

Benzene (C_6H_6) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

f. t.	%
-7.5	38.0 E
+6.88	100.0

Benzene (C_6H_6) + Tripropylcarbinol ($C_{10}H_{22}O$)

Hassel and Naeshagen, 1932

molarity	ϵ
18°	
0.0	2.2951
0.07894	2.3192
0.1439	2.3386
0.1977	2.3539

Benzene (C_6H_6) + Undecyl alcohol ($C_{11}H_{24}O$)

Mahanti, 1929

mol%	d	ϵ
25°		
0.00	0.872	2.26
1.15	0.869	2.27
2.17	0.866	2.32
3.34	0.865	2.38
5.29	0.864	2.44
7.19	0.862	2.53
9.62	0.859	2.65
12.47	0.856	2.74
100	6.833	-

Benzene (C_6H_6) + Dodecyl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

f. t.	%
2.5	23.9 E
10.0	58.2
20.0	93.3
23.95	100

Mahanti, 1929

mol%	c
25°	
0.00	2.28
0.63	2.23
1.32	2.32
2.90	2.35
4.90	2.41
7.56	2.53
9.98	2.62
13.90	2.80
100	-

Benzene (C_6H_6) + Tetradecyl alcohol ($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

f. t.	%
5.2	6.5 E
10.0	12.4
20.0	42.5
30.0	78.0
38.26	100

Benzene (C_6H_6) + Cetyl alcohol ($C_{16}H_{34}O$)

Mameli, 1903

%	D f. t.
0.595	-0.083
1.493	0.206
7.519	0.855
8.965	1.033
12.179	1.350
14.818	1.622

Hoerr, Harwood and Ralston, 1944

f. t.	%
5.5	1.7 E
10.0	2.7
20.0	11.9
30.0	42.2
40.0	75.2
49.62	100

Innes, 1918

wt%	mol%	p
75°		
0	0	652.4
4.50	1.49	641.5
9.40	3.24	632.0
18.7	6.87	610.5
27.6	10.92	589.0
38.0	16.5	556.6
47.1	23.0	520.0
58.2	30.9	471.8

Benzene (C_6H_6) + Octadecyl alcohol ($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

f. t.	%
5.5	0.8 E
10.0	1.2
20.0	4.0
30.0	18.2
40.0	49.5
50.0	81.1
57.98	100

Benzene (C_6H_6) + Allyl alcohol (C_3H_6O)

Ryland, 1899

%	b. t.	
0	79 - 79.5	
20	76 - 77	Az
100	95 - 96	

Lecat, 1949

%	b. t.	
0	80.15	
17.3	76.8	Az
100	96.85	

Wallace and Atkins, 1912

Az : 17.36% 79.75°

%	d	
	0°	
0	0.90006	
15.81	0.89332	
18.77	0.89228	
100	0.86900	

Benzene (C_6H_6) + Ethylene glycol ($C_2H_4O_2$)

Francis, 1944

C.S.T. = 180°

Leibnitz, Konnecke and Niese, 1957

t	d		
	L ₁	L ₂	σ interface (L ₁ /L ₂)
20	1.0984	0.8789	7.306
40	.0829	.8588	7.002
60	.0665	.8374	6.577

Benzene (C_6H_6) + Propylene glycol ($C_3H_8O_2$)

Francis, 1944

C.S.T. = 90°

Benzene (C_6H_6) + Diethylene glycol ($C_4H_{10}O_3$)

Johnson and Francis, 1954

%	sat. t.	%	sat. t.
2.7	19	43.6	88.5
5.2	45	46.5	88.5
7.05	56	53.0	86
7.9	60.5	64.2	67
12.5	74.5	68.2	42.5
19.1	81.5	68.5	45
23.2	85	68.8	43
28.4	87	69.0	5
37.4	87	69.2	5
40.6	88		

Francis, 1944

C.S.T. = 92°

Leibnitz, Konnecke and Niese, 1957

t	d		
	L ₁	L ₂	σ interface (L ₁ /L ₂)
20	1.0241	0.8892	0.511
40	.0068	.8726	.447
60	0.9833	.8587	.313

Benzene (C_6H_6) + Triethylene glycol ($C_6H_{14}O_4$)

Francis, 1944

C.S.T. = 22°

Benzene (C_6H_6) + Methyl malate ($C_6H_{10}O_5$)

Walden, 1906

t	%	d	(α) _D
5	1.58	0.901	+0.69
20	1.58	0.883	-0.09
20	6.71	0.896	-2.02
20	7.42	0.8975	-2.61
20	11.70	0.908	-3.29
20	14.89	0.924	-3.48
70	6.70	0.841	-2.10
70	14.89	0.870	-3.70

Grossmann and Landau, 1910

c	(α)		
	red	yellow	green
	20°		
100 %	-5.62	-6.42	-7.57
50.590	-4.65	-5.04	-5.34
25.295	-3.87	-4.23	-4.55
12.6475	-2.69	-3.48	-3.87
5.039	-2.38	-2.78	-2.18
2.5195	-0.79	-0.40	0.0

c	(α)		
	light blue	dark blue	viol.
	20°		
100 %	-8.96	-9.49	-9.86
50.590	-6.42	-6.72	-7.12
25.295	-4.82	-4.98	-
12.6475	-3.56	-3.16	-
5.039	-1.79	-1.39	-0.99
2.5195	+0.40	+0.79	-

colour	(α)	b	(α)	b	(α)	b
	18°					
	22.6 g/100cc		11.30 g/100cc		2.82 g/100cc	
Red	- 8.19	1	- 8.01	1	- 7.4	1
Green	-12.57	1.52	-12.35	1.54	-11.9	1.57
Violet	-16.72	2.04	-16.02	2.00	-14.7	2.00

b = dispersion coefficient

Benzene (C_6H_6) + Ethyl malate ($C_8H_{14}O_5$)

Walden, 1906

%	D b. t.
4.75	+0.577
7.38	+0.877
9.29	+1.124
11.49	+1.415
13.67	+1.686

%

d

(α)_D

	70°	
14.37	0.859	-9.98
6.70	0.840	-9.12

	20°	
14.37	0.953	-9.81
11.26	0.901	-9.79
6.70	0.892	-9.55

Benzene (C_6H_6) + Dimethyl tartrate ($C_6H_{10}O_6$)

Innes, 1918

wt %

mol %

p

	53°	
0	0	302.3
13.4	6.47	291.9
20.8	10.3	289.2
26.4	13.6	287.0
35.4	19.3	286.7
45.8	26.9	284.2
56.7	36.5	281.6
66.8	46.9	273.5
75.2	57.1	260.0
89.6	79.1	188.3
90.3	80.2	148.3

	63°	
0	0	436.3
29.5	15.5	410.7
41.8	23.9	405.4
50.5	30.8	400.7
59.6	39.4	394.7
68.4	48.6	387.1
78.3	61.0	351.6
91.5	80.3	191.0

	75°	
0	2.1	649.7
4.66	4.62	638.9
9.54	8.15	630.0
14.17	13.03	620.0
25.4	18.1	612.8
33.5	24.0	606.4
41.9	34.3	599.8
54.5	-	584.0

0	0	652.0
49.7	30.4	586.1
60.0	39.8	573.8
69.1	49.6	552.0
77.6	60.5	509.0
83.2	68.5	467.9

0	0	651.8
85.8	72.4	443.5
91.2	81.8	351.2
92.9	85.2	285.1
95.8	90.9	189.3

BENZENE + ETHYL TARTRATE

97

Innes, 1902			
%	D b.t.	%	D b.t.
310 mm	53.7°	433 mm	63.1°
1.29	+0.147	0.98	+0.083
3.41	0.337	1.98	0.214
5.70	0.520	3.61	0.367
7.79	0.662	5.86	0.556
10.63	0.821	8.74	0.764
14.11	1.000	11.80	0.957
		15.28	1.156
		19.03	1.344
612.8 mm	73.2°	735mm	79.2°
1.34	+0.162	1.21	+0.159
2.99	0.339	2.47	0.301
5.24	0.567	4.35	0.500
6.98	0.794	7.08	0.751
10.58	1.091	10.39	1.029
14.46	1.371	15.25	1.371
17.56	1.571	18.77	1.592
20.43	1.751		
1090 mm	93.1°		
1.92	+0.266		
3.79	0.492		
6.28	0.780		
8.41	0.997		
12.46	1.351		
16.07	1.613		
Walden, 1906			
%	D b.t.		
3.51	+0.441		
5.46	0.634		
7.62	0.832		
9.41	0.972		
11.38	1.125		
%	d	(α) _D	
	70°		
14.67	0.879	-1.72	
	20°		
14.67	0.9326	-7.17	
11.38	0.9090	7.82	
7.41	0.8997	8.09	
4.85	0.8910	8.01	

Benzene (C ₆ H ₆) + Ethyl tartrate (C ₈ H ₁₄ O ₆)			
Purdie and Barbour, 1901			
%	d	(α) _D	
	20°		
5.6479	0.8913	+6.75	
10.7339	0.9038	6.29	
21.0627	0.9308	6.12	
100	1.2059	7.61	
Patterson, 1902			
t	d	t	d
	0%		1.001%
17.95	0.88112	19.65	0.98162
25.25	0.87336	21.86	0.87919
32.90	0.86514	26.53	0.87419
42.65	0.85462		
47.05	0.84989		
58.90	0.8367		
2.04523%		1.35346%	
20	0.88351	18.6	0.88338
21.5	0.88194	20.85	0.88099
24.22	0.87900	24.53	0.87706
3.01748%		2.5206%	
18.1	0.88779	19.61	0.88501
20.36	0.88537	21.66	0.88284
24.03	0.88143	25.29	0.87893
		34.57	0.86894
4.9965%		45.05	0.83764
18.15	0.89229		7.5338%
28.69	0.88116		
37.97	0.87111	19.7	0.89684
45.8	0.86260	21.35	0.89506
		25.63	0.89048
10.0018%		17.4175%	
17.6	0.9049		
17.9	0.9032	16.33	0.92531
19.41	0.9017	20.70	0.92063
20.9	0.8903	25.60	0.91535
31.45	0.8810		24.978%
40.07	0.8576		
61.28	0.9052		
50.004%		17.50	0.9442
		21.7	0.9397
		21.75	0.9284
19.3	1.0165	32.15	0.9166
22.4	1.0119	43.15	0.8971
23.7	1.0004	60.60	0.9427
34.5	0.9879		
46.2	0.9696		
62.8	1.0228		
100%		75.199%	
		20.7	1.1027
16.8	1.2087	23.55	1.0919
37.2	1.1878	31.05	1.0904
46.8	1.1783	32.63	1.0870
58.3	1.1665	36.7	1.0783
68.1	1.1566	43.5	1.0608
76.2	1.1484	60.2	1.0998
99.4	1.1248		

t		(α) _D	t		(α) _D
1.001%			1.35346%		
9.6	4.12		20	5.80	
16.2	5.50		29.4	7.22	
18	5.82				
24.1	7.01				
2.5206%			2.04523%		
8.4	4.29		14.8	5.47	
16.1	5.65		19.7	6.20	
23.6	6.83		20	6.23	
30.5	8.01				
45	9.98				
3.01748%			4.9965%		
17	6.19		8.2	4.85	
21.5	6.86		12.5	5.45	
31.8	8.39		18.1	6.37	
7.5338%			30.2	8.06	
12	5.30		40.8	9.54	
14.4	5.62		45.7	10.12	
17	6.08		51.5	10.80	
23.8	7.13		54.8	11.30	
17.4175%			10.0018%		
16.5	6.12		7.9	4.95	
21.7	6.90		11.8	5.56	
27.3	7.73		13.3	5.77	
24.978%			17	6.31	
7	4.51		18.6	6.57	
10.7	5.05		29.6	8.00	
17.7	6.28		42.5	9.60	
19.9	6.52		50.2	10.55	
25	7.24		55.2	11.14	
49.2	10.32		50.004%		
53.6	10.90		15	5.39	
59.9	11.42		27.1	7.18	
75.199%			9.9	4.62	
10	5.14		58.6	10.81	
16	5.93		54.6	10.33	
16.5	6.05		44.7	9.24	
24.1	7.05		16	5.50	
31	7.80		21.4	6.39	
42.2	9.11		100%		
46.3	9.54		10.8	+6.63	
49.8	9.91		11.3	6.66	
			16.0	7.21	
			20.1	7.67	
			25.1	8.25	
			29.9	8.70	
			33.7	9.10	
			46.1	10.24	
			55.1	10.94	
			67.2	11.75	
			77.1	12.30	
			84.4	12.73	
			89.4	12.97	
			100	13.47	

Winther, 1903					
t	d	(α)			blue
		red	yellow	green	light dark
100%					
20	1.2025	+6.73	+7.38	+7.24	+4.39 +2.71
30	1.1929	7.48	8.38	8.51	6.28 4.80
40	1.1832	8.17	9.28	9.66	7.99 6.72
50	1.1731	8.80	10.09	10.69	9.53 8.46
69.12%					
20	1.0757	+4.87	+4.91	+4.21	+0.05 -2.08
30	1.0659	5.86	6.16	5.80	2.42 +0.50
40	1.0558	6.75	7.38	7.26	4.53 2.90
50	1.0452	-	-	-	-
33.41%					
20	0.9649	+5.30	+5.18	+4.44	-0.25 -2.42
30	0.9543	6.40	6.58	6.21	+2.32 +0.31
40	0.9441	7.32	7.96	7.77	4.75 2.73
50	0.9335	-	-	-	-

Winther, 1907		
%	d	(α) _D
100	20°	-
43.612	1.20435	-
24.319	0.99494	5.59
18.720	0.93932	5.98
6.322	0.92442	5.99
0	0.89330	6.27
	0.87844	-

colour				
(α)				
43.612%	24.319%	18.720%	6.321%	
20°				
red	+5.52	+5.80	+5.72	+6.01
yellow	5.59	5.98	5.99	6.27
green	4.94	5.35	5.30	5.39
light blue	1.24	1.23	1.22	1.24
dark blue	-1.71	-1.69	-1.69	-2.16

Walden, 1906	
%	D b. t.
4.82	+0.494
7.59	0.769
9.85	0.967
12.43	1.189
14.47	1.419

%	d	(α) _D
70°		
14.86	0.865	+12.06
6.71	0.842	11.88
50°		
14.56	0.888	+10.05
6.46	0.860	11.04
20°		
14.86	0.923	+5.83
14.56	0.920	5.61
14.47	0.915	5.78
10.05	0.902	5.30
6.71	0.897	5.08
5°		
14.56	0.938	+3.38
6.45	0.911	3.82

Rule, Barnett and Cunningham, 1933

mol%	(α) ₅₄₆₁ ^{mol}
20°	
2.33	+10.9
7.22	11.4
11.99	11.50
15.90	11.58
21.40	11.57
27.50	11.25
35.00	10.71
42.84	11.03

Benzene (C₆H₆) + Monoethyl ether of pentaethylene glycol (C₁₈H₃₈O₆)

Sarolea, 1950

mol%	d	σ
20°		
0	0.9909	32.88
36.6	0.976	31.52
51.7	0.967	30.99
70.3	0.949	30.11
80.1	0.923	29.66
91.8	0.907	29.22
100	0.8789	28.70

Benzene (C₆H₆) + Propyl tartrate (C₁₀H₁₈O₆)

Purdie and Barbour, 1901

%	d	(α) _D
20°		
5.6205	0.8886	+19.62
5.4685	0.8890	20.78
11.1266	0.8993	20.34
22.2112	0.9257	18.31
100	1.1344	+12.31

Winther, 1903

t	d	(α)			blue	
		red	yellow	green	light	dark
100%						
20	1.1389	10.17	+11.81	+12.98	+12.77	+11.98
30	1.1306	10.89	12.74	14.14	14.46	13.86
40	1.1212	11.54	13.57	15.20	16.02	15.59
75.91%						
20	1.0648	+11.29	+13.39	+14.98	+15.45	+14.86
30	1.0549	11.99	14.26	16.14	17.17	16.76
40	1.0460	12.56	15.15	17.13	18.65	18.36
45.51%						
20	0.9811	+13.06	+15.80	+17.82	+19.23	+18.86
30	0.9713	13.73	16.64	18.35	20.71	20.62
40	0.9619	14.31	17.34	19.87	22.15	22.22
16.36%						
20	0.9128	+15.35	+18.60	+21.28	+23.90	+24.24
30	0.9031	15.74	19.24	22.25	24.99	25.19
40	0.8928	16.11	19.92	23.00	25.99	26.52

Benzene (C₆H₆) + Monoacetin (C₅H₁₀O₄)

Francis, 1944

C.S.T. = 93°

Benzene (C_6H_6) + Cyclohexanol ($C_6H_{12}O$)

Weissenberger and Schuster, 1924

mol%	p_1	mol%	p_1
20°			
88.5	18	33.5	67
80.0	28	25	71
66.5	41	20	72
57	49	0	75
50	56		
40	63		
mol%	η (water=1)	σ	
20°			
100	14.5	0.474	
80	5.2	0.445	
66.5	2.9	0.433	
57	2.1	0.431	
50	1.7	0.432	
40	1.3	0.415	
33.5	1.1	0.410	
25	0.96	0.405	
20	0.86	0.403	
0	0.64	0.396	

Wheeler and Jones, 1952

%	n_D	%	n_D
25°			
100	1.46472	51.05	1.47763
91.79	1.46659	40.99	1.48096
86.11	1.46790	42.65	1.48389
79.41	1.46957	18.60	1.48870
71.75	1.47165	9.45	1.49215
60.25	1.47481	0	1.49573

Wulff and Takashima, 1938

mol%	d	ϵ	η
18° - 20°			
0	0.8791	2.29	640
10	-	2.75	-
20	-	3.36	1100
30	0.8965	4.21	1400
50	0.9101	6.78	2900
60	-	7.70	-
70	0.9247	9.99	8600
85	0.9341	11.66	25400
100	0.9415	13.4	59600

Cavallaro, 1940

w.l. (in m.)	light absorption = $(D - D')/D$			
	100	75	50	25
mol%				
25°				
26	0.35	0.23	0.20	0.10
20	0.38	0.25	0.23	0.13
16	0.43	0.28	0.25	0.17
8	0.52	0.38	0.41	0.25
6.5	0.57	0.42	0.47	0.28
5.0	0.60	0.47	0.45	0.30
4.5	0.47	0.50	0.41	0.32

Hassel and Naeshagen, 1932

mol%	ϵ
18°	
0.000	2.2951
9.092	2.3281
17.09	2.3571
26.23	2.3918

Golzman and Raskin, 1953

mol%	dipole moment $\cdot 10^{18}$
3	1.4
10	1.4
20	1.3
40	1.3
100	1.3

Benzene (C_6H_6) + o-Methyl cyclohexanol
($C_7H_{14}O$)

Weissenberger and Schuster, 1924

mol%	p_1	mol%	p_1
20°			
80	30	33.5	68
66.5	44	28.5	70
57	52	25	71
50	58	20	72
40	64	0	75

mol%	η	σ
(water = 1)		
20°		
100	21.7	0.430
66.5	3.2	0.406
50	1.8	0.403
40	1.5	0.404
33.5	1.3	0.398
25	1.1	0.397
20	1.0	0.397
0	0.64	0.396

Benzene (C_6H_6) + m-Methyl cyclohexanol
($C_7H_{14}O$)

Weissenberger and Schuster, 1924

mol%	p	mol%	p
20°			
80	31	33.5	71
66.5	46	25	74
57	54.8	20	75
50	60	0	75
40	67		

mol%	η	σ
(water = 1)		
20°		
100	22.8	0.407
66.5	4.2	0.399
50	2.1	0.398
40	1.6	0.398
33.5	1.5	0.397
25	1.2	0.397
20	1.1	0.397
0	0.64	0.396

Benzene (C_6H_6) + p-Methylcyclohexanol ($C_7H_{14}O$)

Weissenberger and Schuster, 1924

mol%	p_1	mol%	p_1
20°			
80	32	33.5	72
66.5	48	25	75
57	57	20	75
50	63	0	75
40	69		

mol%	η	σ
(water=1)		
20°		
100	30.4	0.420
66.5	5.3	0.406
57	-	0.404
50	2.4	0.406
40	1.8	0.400
33.5	1.6	0.399
25	1.4	0.398
20	1.3	0.397
0	0.64	0.396

Hassel and Naeshagen, 1932

molarity	ϵ
18°	
0.0	2.2951
0.1201	2.3370
0.1776	2.3568
0.2382	2.3772

Benzene (C_6H_6) + 1,3,5-Trimethyl cyclohexanol
($C_9H_{18}O$)

Hassel and Naeshagen, 1932

molarity	ϵ
18°	
0.0	2.2951
0.07000	2.3246
0.1333	2.3512
0.2082	2.3835

Benzene (C ₆ H ₆) + Borneol (C ₁₀ H ₁₈ O)			
Beckmann, 1888			
%	f. t.		
0	5.44		
0.423	5.30		
1.20	5.055		
2.72	4.605		
4.40	4.255		
6.48	3.675		
9.92	2.965		
12.28	2.490		
Harms, 1935 (fig.)			
molarity	d	molarity	d
7°			
0.0	0.9630	0.5	0.9696
0.1	0.9643	0.6	0.9699
0.2	0.9658	0.7	0.9701
0.3	0.9670	0.8	0.9703
0.4	0.9684		
Peacock, 1914			
%	d	n _D	(α) _D
25°			
0.9238	0.8737	1.4995	26.6
2.3214	0.8747	1.4992	30.5
4.586	0.8765	1.4985	29.3
11.348	0.8813	1.4973	28.8
16.940	0.8864	1.4960	28.6
22.455	0.8909	1.4953	28.2
Golzman and Raskin, 1953			
mol%	dipole moment 10 ¹⁸		
3	1.2		
10	1.2		
20	1.2		
40	1.2		
100	1.2		
(fig.)			
mol%	t. of the maximum of dielectric losses		
5	15		
14	20		
20	25		
30	32		
40	38		
44	41		

Benzene (C ₆ H ₆) + Menthol (C ₁₀ H ₂₀ O)					
Dahms, 1905					
mol%	f. t.	mol%	f. t.		
0	+5.34	28.83	-3.00		
0.014	5.331	30.0	-3.4		
0.084	5.284	31.34	-3.62		
0.493	5.016	37.83	0.0		
1.410	4.514	46.38	+5.4		
2.160	4.19	53.01	9.9		
4.466	3.395	60.84	15.25		
4.617	3.32	65.01	18.1		
7.784	2.42	74.34	24.7		
10.49	1.79	81.72	29.7		
11.35	1.61	91.134	35.9		
16.56	+0.37	95.372	38.55		
18.84	-0.28	100	41.9		
Harms, 1935					
M	d	M	d		
7°					
0.0	0.8867	0.5	0.8912		
0.1	0.8871	0.6	0.8920		
0.2	0.8872	0.7	0.8928		
0.3	0.8893	0.8	0.8932		
0.4	0.8902				
Castiglioni, 1934					
%	d	η			
20°					
0	0.8773	625.40			
10	0.8796	687.87			
20	0.8810	774.57			
30	0.8823	936.24			
40	0.8837	1182.42			
50	0.8852	1528.01			
60	0.8869	2171.83			
Eggers, 1904					
mol%	t	ε			
0.0	24	2.25			
8.2	23	3.05			
17.8	22.5	3.7			
19.0	22.5	3.82			
29.3	23	5.0			
31.7	24	4.9			
Kanonnikoff, 1885					
%	t	d	n	D	H _(β)
H _(α)					
21.02	21.4	0.87954	1.48614	1.49041	1.50107
0	20	0.88041	1.49690	1.50165	1.51324

Benzene (C_6H_6) + Benzyl alcohol (C_7H_8O)

Mameli, 1903

%	D b.t.	%	D b.t.
16.225	2.780	4.632	1.019
12.903	2.308	2.606	0.594
9.000	1.782	1.116	0.269
6.441	1.328	0.917	0.222
		0.440	0.108

Martin and George, 1933

mol%	d	mol%	d
25°			
0	0.87288	0.27048	0.92481
0.05162	0.88372	0.41644	0.95182
0.09838	0.89231	0.54908	0.97451
0.11056	0.89502	0.67562	0.99489
0.13298	0.89923	0.86285	1.02230
0.25792	0.92306	1.00000	1.04127

Martin, 1937

mol%	d
70°	
0.00	0.8246
19.74	0.8663
37.66	0.9020
49.50	0.9238
65.24	0.9514
77.20	0.9718
100.00	0.0062

Hückel, Niesel and Bucks, 1944

t	σ			
	50	67	75	100
	mol%			
15	34.79	35.39	36.94	37.44
20	33.31	34.20	35.73	36.94
25	32.51	33.38	35.46	37.61
30	31.90	33.28	35.33	38.80
35	32.15	33.78	35.93	39.59
40	31.50	32.81	33.71	39.18
45	30.83	32.17	32.98	-
50	29.89	30.96	31.90	34.80
54	-	-	31.16	33.52
60	29.12	-	-	-

Martin and George, 1933

mol%	$n_{H\alpha}$	mol%	$n_{H\alpha}$
25°			
-	1.49312	27.048	1.50631
5.162	1.49561	41.644	1.51250
9.838	1.49825	54.908	1.52001
11.056	1.49833	67.562	1.52296
113.298	1.49889	86.285	1.52935
125.792	1.50557	110.000	1.53359

Kerr, 1926

%	ϵ
14°	
0	2.28
20	3.37
40	4.86
60	7.46
80	10.58
100	13.63

Martin, 1937

mol%	ϵ
70°	
0.00	2.193
19.74	3.039
37.66	4.163
49.50	4.961
65.24	6.277
77.20	7.327
100.00	9.467

Benzene (C_6H_6) + Phenylethyl alcohol ($C_8H_{10}O$)

Glowaski and Lynch, 1933

mol%	d	mol%	d
25°			
0	0.8724	60.68	0.9705
9.31	0.8898	74.02	0.9882
20.00	0.9096	82.02	0.9972
30.66	0.9277	93.35	1.0092
41.25	0.9437	100	1.0160
50.16	0.9569		

Mahanti, 1929		
mol%	d	ε
25°		
0.00	0.872	2.26
1.66	0.873	2.32
3.75	0.876	2.50
5.44	0.884	2.65
7.02	0.886	2.71
9.09	0.889	2.80
11.48	0.895	2.89
13.74	0.898	2.95
100	0.995	-

Benzene (C ₆ H ₆) + Phenyl propyl alcohol (C ₉ H ₁₂ O)		
Mahanti, 1929		
mol%	d	ε
25°		
0.00	0.872	2.26
1.00	0.873	2.32
2.38	0.876	2.50
3.74	0.879	2.53
5.20	0.882	2.62
6.65	0.885	2.71
8.96	0.888	2.80
12.27	0.892	2.95
100	0.990	-

Benzene (C ₆ H ₆) + Benzhydrol (C ₁₃ H ₁₂ O)		
Beckmann, 1888		
%	f. t.	
0	5.440	
1.04	5.155	
2.53	4.770	
3.98	4.427	
7.84	3.620	
13.85	2.865	
16.68	2.395	

Schmidlin and Lang, 1912 (fig.)		
%	f. t.	tr. t.
100	66	-
90	58	-
80	50	32
70.3	42	32.5
60	33.5	31.5
57	30	30
50	28	-
40	20	-
30	11	-
21	1 E	-
10	4	-
0	5.5	-

%	f. t.	%	f. t.
100	65.9	55.9	29.7
87.3	55.5	54.0	29.4
75.3	46	51.2	27.9
71.2	42.5	46.6	25.7
66.7	38.3	45.0	23.5
64.9	37.5	40.1	20.9
62.8	35.7	38.4	18.3
61.4	34.8	36.4	16.5
59.5	33.5	31.9	11.6
55.5	30.8	28.7	8.6
53.4	29.5	25.7	6.0
50.1	27.7	22.2	3.1
47.2	25.6		
25.0	5.6		
20.0	1.5		
15.0	2.5		
10.0	3.6		
4.9	4.5		

Benzene (C ₆ H ₆) + Ethanolamine (C ₂ H ₇ ON)		
Francis, 1944		
C.S.T. = 103		

Benzene (C ₆ H ₆) + Triethanolamine (C ₆ H ₁₅ O ₃ N)		
Francis, 1944		
C.S.T. = 155		

Benzene (C_6H_6) + Ethylenchlorhydrin ($C_2H_4OCl_2$)

Ben Snyder and Gilbert, 1942

b. t.	L	mol% V
114.0	98.8	71.1
98.8	94.6	47.2
95.0	92.2	39.3
92.8	89.9	30.8
88.2	81.4	75.7
86.2	74.6	20.8
84.4	63.0	17.0
83.5	54.6	15.0
82.0	33.8	12.2
81.7	28.5	11.2
81.2	20.1	8.5
80.5	10.2	5.2

Benzene (C_6H_6) + Chloral alcoholate ($C_2H_3O_2Cl_3$)

Beckmann, 1888

%	f. t.	%	f. t.
0	5.44	9.54	3.000
0.56	5.285	12.63	2.270
1.32	5.080	16.05	1.480
2.50	4.770	18.47	+ 0.900
3.71	4.460	22.86	-0.160
5.91	3.900		

Benzene (C_6H_6) + TetramethyldiaminobenzhydrolSchmidlin and Lang, 1912 (fig.) ($C_{17}H_{22}ON_2$)

%	f. t.	tr. t.
100	99	-
90	88	-
77.6	74	53.5
70	63	53
62	50	-
50	45	-
40	39	- (1+1)
30	33.5	-
20	25	-
10	12	-
3	2 E	-
0	5.5	-

%	f. t.	%	f. t.
100	98.5	61.9	51.2
85.0	83	53.6	48.5
79.6	76	45.9	42.8
79.1	75	37.0	37.8
77.0	73	26.9	30.5
70.4	64.5	21.6	25.7
64.4	55.5	16.6	20.1
62.3	50		

Benzene (C_6H_6) + Quinine ($C_{20}H_{24}N_2O_2$)

Van Iterson-Rotgans, 1913

%	f. t.
stable	
0	5.4
0.72	17 (1 + 1)
1.09	22 "
1.48	29 "
2.05	35 "
2.36	38.5
4.81	53 - 55 (2 + 3)
5.27	60 "
6.09	63 "
10.4	72 "
30.01	91 "
34	94 "
43.4	102 "
44.75	103 "
45.9	104.5 "
48.9	107 "
51.8	109 "
60.3	116 "
75.46	130 "
80	137 mixed crystals
83.04	142 "
85.26	146 "
87.44	152 "
91.4	158.9 "
95.02	166 "
100	174.7 "
metastable	
5.27	49 (1 + 1)
6.09	50 . 51 "
16.78	62 "
28.9	70 "

Benzene (C₆H₆) + Ethanethiol (C₂H₅S)

Wang, 1940

mol%	d	ε
15°		
0.000	0.88408	2.292
1.620	0.88344	2.309
3.045	0.88284	2.369
4.693	0.88222	2.427
9.074	0.88048	2.569
12.388	0.87919	2.676
14.287	0.87843	2.742
16.136	0.87768	2.801
24.58	0.87434	3.086
73.257	0.85425	5.244
92.474	0.84558	6.348
100.000	0.84204	6.912

Benzene (C₆H₆) + Butanethiol (C₄H₉S)

Walss and Smyth, 1933

mol%	d		ε	
	25°	50°	25°	50°
0	0.8730	0.8461	2.276	2.226
2.771	0.8714	0.8446	2.353	2.294
5.204	0.8703	0.8436	2.421	2.355
7.853	0.8686	0.8421	2.498	2.423
13.773	0.8659	0.8396	2.666	2.571
22.957	0.8617	0.8358	2.925	2.803
37.1720	0.8562	0.8304	3.315	3.142
56.844	0.8492	0.8239	3.847	3.611
100	0.8368	0.8123	4.952	4.586

Benzene (C₆H₆) + Pentanethiol (C₅H₁₁S)

Walls and Smyth, 1933

mol%	d		ε	
	25°	50°	25°	50°
0	0.8730	0.8461	2.276	2.226
2.123	0.8718	0.8451	2.337	2.280
2.965	0.8712	0.8444	2.362	2.302
5.362	0.8698	0.8432	2.427	2.361
6.427	0.8692	0.8427	2.460	2.387
13.816	0.8693	0.8392	2.663	2.567
21.759	0.8612	0.8357	2.877	2.753
23.514	0.8603	0.8350	2.914	2.789
40.585	0.8535	0.8291	3.337	3.158
51.977	0.8493	0.8255	3.600	3.388
100	0.8373	0.8145	4.547	4.230

Toluene (C₇H₈) + Methyl alcohol (CH₃O)

Lecat, 1949

%	b. t.	
0	110.75	Az
69	63.75	
100	64.65	

Washburn and Lightbody, 1930

mol%	d	mol%	d
25°			
0	0.86082	88.7	0.80621
12.0	0.85820	93.7	0.79859
22.6	0.85421	95.9	0.79477
31.7	0.85061	98.0	0.79089
46.7	0.84355	100	0.78706
72.4	0.82534		

Teitelbaum, Gortalova and Ganelina, 1950

mol%	d	η
20°		
0	0.8660	593
20	0.8596	582
40	0.8517	601
60	0.8400	620
80	0.8223	623
100	0.7923	578

Mason and Washburn, 1936

%	U	%	U
25°		35°	
10.17	0.453	9.17	0.447
18.71	0.474	18.73	0.479
28.37	0.503	28.09	0.503
37.43	0.518	37.96	0.525
52.27	0.547	47.66	0.541
60.77	0.564	57.63	0.560
70.94	0.581	68.21	0.577
80.34	0.600	78.47	0.597
89.55	0.607	89.25	0.610
%	Q dil.	%	Q dil.
25°		35°	
10.38	-2.343	10.10	-2.462
19.62	-2.639	18.86	-2.758
28.80	-2.692	37.74	-2.731
38.82	-2.482	57.74	-1.943
48.28	-2.174	78.61	-1.050
57.64	-1.832		
68.07	-1.450		
78.56	-1.047		
88.18	-0.581		

Toluene (C_7H_8) + Ethyl alcohol (C_2H_6O)

Burwinkel, 1914

t	p	t	p
100%		100%	
10	16	70	212
20	25	80	304
30	42	90	418
40	66	100	576
50	98	110	758
60	145		

t	p		
	85.45%	65.00%	50.00%
10	31	34	34
20	54	57	56
30	97	100	99
40	115	169	171
50	246	260	261
60	343	416	419
70	552	601	605

t	p		
	30.79%	17.89%	0.00%
10	33	29	24
20	54	51	45
30	99	94	79
40	162	155	132
50	260	241	226
60	411	390	359
70	602	592	547

Lehfeldt, 1898

%	p	%	p
50°			
0	93.0	50.15	249.2
2.14	141.2	61.65	248.2
9.74	214.8	71.95	244.4
18.26	233.1	78.60	243.0
29.98	242.1	92.29	230.9
40.50	244.2	100	219.5

mol%			p
L	V		
50°			
7.4	41.9		119.5
20.0	49.1		235.0
28.0	51.6		241.0
36.3	54.4		245.0
46.4	55.4		247.0
58.2	58.6		249.0
67.5	62.1		246.5
79.3	72.3		241.5
89.8	82.1		233.5

Lehfeldt, 1899

L	mol%	V	p
50°			
0		0	93.0
12.1		37.2	199.5
48.6		47.4	233.5
100		100	219.5

Wright, 1933

L	mol%	V	p
60°			
0		0	139.5
10.7		61.8	240
23.1		67.5	367
35.2		68.3	373
44.3		69.0	382
54.3		71.1	387
62.5		72.3	390
72.6		74.4	395
76.7		75.8	297
84.5		80.2	397
90.4		85.3	388
95.7		92.2	375
100.0		100.0	352.7

65°			
0		0	166
10.7		61.9	301
23.1		68.1	455
35.2		69.3	466
44.3		70.0	472
54.3		71.8	477
62.5		73.1	481
72.6		75.2	486
76.7		76.6	487
84.5		80.8	488
90.4		85.7	480
95.7		92.3	466
100.0		100.0	436.9

70°			
0		0	202.4
10.7		62.0	367
23.1		68.6	557
35.2		70.3	569
44.3		71.0	572
54.3		72.4	584
62.5		73.9	590
72.6		76.0	592
76.7		77.4	598
84.5		81.4	598
90.4		86.1	591
95.7		92.4	575
100.0		100.0	542.5

mol%			Kretschmer and Wiebe, 1949		
L	V	P	L	V	P
75°			35°		
0	0	244	3.30	42.16	79.38
10.7	62.0	444	4.68	47.49	86.34
23.1	69.3	677	12.14	56.62	102.09
35.2	71.4	688	20.79	60.14	108.93
44.3	72.0	698	36.20	63.46	114.26
54.3	73.1	707	41.60	63.84	115.34
62.5	74.7	715	59.30	67.30	117.90
72.6	76.8	722	72.63	71.64	118.57
76.7	78.3	724	85.19	78.48	116.56
84.5	82.0	724	97.01	93.18	107.64
90.4	86.5	716	55°		
95.7	92.5	699	4.39	43.69	196.64
100.0	100.0	666.1	11.57	56.79	247.70
80°			24.97	63.19	279.24
0	0	289.7	40.34	66.49	294.75
10.7	62.1	537	62.82	71.50	305.48
23.1	69.9	818	71.86	74.31	307.81
35.2	72.9	832	84.23	80.49	306.23
44.3	73.0	844	91.63	86.85	299.53
54.3	73.8	856	96.35	93.07	290.47
62.5	75.5	864	Robinson, Wright and Bennett, 1932		
72.6	77.7	874	mol% b. t (Az)		
76.7	79.1	877	36.8	0.5	
84.5	82.5	880	26.95	25.0	
90.4	87.0	868	21.6	50.0	
95.7	92.6	848	18.2	75.5	
100.0	100.0	812.6	Swietoslawski, 1932.		
85°			Az. (760 mm) : 76.83°		
0	0	397.0	Lecat, 1949		
10.7	62.1	642	% b. t. Dt mix		
23.1	70.6	990	0	110.75	
35.2	73.4	1005	68	76.65	Az
44.3	74.0	1016	100	78.3	-1.8
54.3	74.3	1027			
62.5	76.4	1037			
72.6	78.5	1047			
76.7	80.0	1052			
84.5	83.1	1052			
90.4	87.4	1047			
95.7	92.7	1026			
100.0	100.0	986.3			

Jahn, 1891			Kretschmer and Wiebe, 1949		
% d			wt% mol% d		
20°			25°		
0	0.86533		0.00	0.00	0.86219
62.88	0.81759		1.44	2.84	0.86073
100	0.79009		5.28	10.02	0.85735
			13.44	23.70	0.85073
			19.04	31.98	0.84638
			28.26	44.07	0.83933
			28.82	44.86	0.83833
			36.58	53.56	0.83305
			46.47	63.45	0.82567
			56.30	72.04	0.81830
			72.49	84.05	0.80611
			84.74	91.74	0.79681
			100	100	0.78508
de Kowalski and de Modzelewski, 1901			Staszewski, 1917.		
% d			% η		
at room temperature			24°		
100.000	0.79373		0	592	
85.869	0.80422		10	601	
66.260	0.81841		15	621	
55.346	0.82622		25	699	
51.166	0.82921		50	887	
42.173	0.83597		75	1050	
28.921	0.84553		100	1280	
17.578	0.85438				
0.00	0.86753				
Burwinkel, 1914			Lemonde, 1938		
% d			vol% η		
17°			15°		
0	0.87150		0	621	
16.551	0.86128		1	621	
35.003	0.85001		3	625	
66.119	0.83157		10	645	
69.211	0.82960		20	670	
82.110	0.82235		40	807	
100.000	0.80942		60	980	
			80	1170	
			99.5	1330	
			100	1340	
Washburn and Lightbody, 1930					
mol% d					
25°					
0	0.86079				
8.8	0.85647				
16.9	0.85295				
24.4	0.84931				
37.8	0.84225				
64.6	0.82407				
84.5	0.80542				
91.1	0.79764				
94.2	0.79375				
100	0.78558				

Lemonde, 1938

vol%	D
15°	
0	-
1	2.58
3	1.32
10	0.90
20	0.72
40	0.70
60	0.86
80	1.27
99.5	1.60
100	-

Lehfelddt, 1898

%	n _D	%	n _D
18°			
0	1.4970	60	1.4131
10	1.4823	70	1.4000
20	1.4680	80	1.3873
30	1.4539	90	1.3747
40	1.4401	100	1.3622
50	1.4265		

de Kowalski and de Modzelewski, 1901

%	n _D	%	n _D
at room temperature			
0.000	1.49551	51.166	1.42381
17.578	1.47137	55.346	1.41821
28.921	1.45417	66.260	1.40396
42.173	1.44185	85.869	1.37875
		100.000	1.36136

Jahn, 1891

%	(α) ^{magn.}
20°	
0	84.77
37.12	125.82
100	203.96

Staszewski, 1917

%	λ
24°	
0	1.00 · 10 ¹⁰
10	2.47 · 10 ¹⁰
15	2.55 · 10 ⁹
25	1.13 · 10 ⁸
50	3.5 · 10 ⁷
75	6.75 · 10 ⁷
100	1.08 · 10 ⁶

Walker and Henderson, 1902

c	%	U	Q mix
80.2	36.48	0.513	332
208.3	18.10	0.470	628
469.6	8.92	0.442	1034
1248.2	3.56	0.419	1803
2584	1.75	0.407	2594
4465	1.03	0.399	3205
6645	0.69	0.395	3515
13222	0.35	0.391	3815

c = g. toluene in one mole of alcohol.

Schulze, 1951

mol%	Q mix	mol%	Q mix
25°			
0	0	56.91	144.9
0.6804	21.85	81.64	64.54
1.4195	42.90	91.164	30.66
5.449	111.3	99.597	1.37
22.12	181.1	100.0	0
42.69	174.8		

Brown, Fock and Smith, 1956

mol %	Q mix	mol %	Q mix
35.00°			
12.2	205.30	67.6	150.81
21.7	234.94	68.1	146.27
37.9	238.52	69.1	140.05
60.3	176.38	87.3	63.09
60.5	176.86		

Toluene (C ₇ H ₈) + Propyl alcohol (C ₃ H ₈ O)			
Ryland, 1899			
%	b. t.		
0	108.7	109.3	
53	91	92 (765mm)	
100	97.5		
Robinson, Wright and Bennett, 1932			
mol%	b. t (Az)		
27.2	0.5		
38.7	25.0		
49.3	50.0		
56.2	71.1		
61.1	91.1		
de Kolossowsky and Alimow, 1935			
%	b. t. (760mm)		
0	110.75		
-	92.35	Az	
100	97.25		
Lecat, 1949			
%	b. t.	Dt mix	
0	110.75		
67	-	-3.7	
79	81.3	Az	
100	82.4		
Robinson, Wright and Bennett, 1932			
mol%	b. t (Az)		
58.3	20.0		
68.6	40.0		
76.0	60.0		
80.7	78.0		
Washburn and Lightbody, 1930			
mol%	d	mol%	d
24°			
0	0.863	2.373	
3.54	0.861	2.531	
6.51	0.859	2.703	
9.76	0.857	2.921	
17.81	0.852	3.722	
25.20	0.847	4.704	
33.75	0.842	5.431	
100	0.8402	22.15	

de Kolossowsky and Alimow, 1935					
%	Q vap (cal/g)				
0	86.68				
100	124.48				
Toluene (C ₇ H ₈) + Isopropyl alcohol (C ₃ H ₈ O)					
Kireev, Cheinker and Peresleni, 1952					
t	mol%	t	mol%		
	L	V	L	V	
110.4	0	0	82.2	57.4	72.1
104.6	3.0	17.9	81.8	67.6	75.5
96.6	7.8	37.7	81.5	70.4	76.5
94.4	10.3	43.4	81.5	74.2	78.1
91.0	14.9	50.2	81.4	78.0	80.7
88.5	20.3	56.2	81.2	81.5	82.4
86.6	25.6	59.8	81.2	85.8	85.4
85.4	31.2	62.2	81.6	93.3	91.8
84.0	39.7	66.3	82.3	100	100
83.2	46.9	69.0			
Lecat, 1949					
%		b. t.	Dt mix		
0		110.75			
67		-	-3.7		
79		81.3	Az		
100		82.4			
Robinson, Wright and Bennett, 1932					
mol%		b. t (Az)			
58.3		20.0			
68.6		40.0			
76.0		60.0			
80.7		78.0			
Washburn and Lightbody, 1930					
mol%		d	mol%		d
25°					
0	0.86072	80.8	0.80469		
6.9	0.85599	88.8	0.79780		
13.5	0.85174	92.6	0.79434		
19.9	0.84777	96.4	0.79074		
31.8	0.84006	100.0	0.78742		
58.4	0.82188				

Toluene (C_7H_8) + Butyl alcohol ($C_4H_{10}O$)

Robinson, Wright and Bennett, 1932

mol%	b.t. (Az)
6.9	0.5
7.3	25.0
8.7	50.0
14.0	73.0
32.7	103.1

Lecat, 1949

%	b.t.	Dt mix
0	110.75	
27	105.7	Az
31		
100	117.8	-3.8

Fuoss, 1943

%	n_D	
	25°	30°
0.0	1.4929	1.4906
20.2	1.4713	1.4690
40.0	1.4517	1.4497
58.9	1.4337	1.4320
76.9	1.4175	1.4153
100.0	1.3969	1.3953

Toluene (C_7H_8) + Isobutyl alcohol ($C_4H_{10}O$)

Kireev, Sheinker and Peresleni, 1952

t		mol%		t	
L	V	L	V	L	V
110.4	0	0	100.8	45.0	52.0
107.2	3.5	13.0	101.1	55.9	55.8
104.7	10.3	22.7	101.2	66.7	57.9
103.8	13.0	28.8	101.7	74.7	63.7
102.5	15.6	32.6	101.9	78.9	66.6
101.9	19.7	35.9	102.8	85.0	73.3
101.4	23.8	40.2	103.6	88.6	78.2
100.9	31.8	43.0	105.2	93.4	86.9
100.6	36.2	45.6	108.0	100	100
100.5	41.2	46.4			

de Kolossowsky and Alimow, 1935

%	b.t. (760mm)
0	110.75
-	101.25
100	107.85
	Az

Lecat, 1949

%	b.t.
0	110.75
56	102.2
100	108.0
	Az

de Kolossowsky and Alimow, 1935

%	Q vap.(cal/gr.)
0	86.68
-	105.10
100	-

Toluene (C_7H_8) + sec. Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b.t.
0	110.75
55	95.5
100	99.5
	Az

Lecat, 1949

Toluene (C₇H₈) (b.t.=110.75) + Amyl alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Isobutyl carbinol	C ₅ H ₁₂ O	131.9	13	110.05	-4.5 (48%)
2-Pentanol	C ₅ H ₁₂ O	119.8	28	107.0	-3.7 (25%)
3-Pentanol	C ₅ H ₁₂ O	116.0	33	106.5	-3.9 (30%)
Methyliso-propyl carbinol	C ₅ H ₁₂ O	112.9	31	105.8	-4.0 (30%)
tert. Amyl alcohol	C ₅ H ₁₂ O	102.35	52	99.4	-4.7 (50%)

Toluene (C₇H₈) + Isoamyl alcohol (C₅H₁₂O)

de Kolossowsky and Theodorowitch, 1935

%	b. t.	Q vap (Cal/g)	
0	110.75	86.68	
-	109.8 Az	97.90	
100	131.3	-	

Toluene (C₇H₈) + 2-Ethoxyethanol (C₄H₁₀O₂)

Kieffer and Grabiell, 1951

%	b. t.	
0	109.4	
10.8	108.7	Az
100	134.0	

mol%	nd	mol%	nd
20°			
0	1.4971	60	1.4452
10	1.4885	70	1.4364
20	1.4798	80	1.4270
30	1.4712	90	1.4173
40	1.4627	100	1.4080
50	1.4542		

Toluene (C₇H₈) + Allyl alcohol (C₃H₆O)

Ryland, 1899

%	b. t.	
0	108.8 -	109.3
50	91 -	92 (756nm)
100	95 -	96

Lecat, 1949

Toluene (C₇H₈) (b.t.=110.75) + Glycols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Methoxy-glycol	(C ₃ H ₈ O ₂)	124.5	25.5	106.1	-2.7 (50%)
Ethoxy-glycol	(C ₄ H ₁₀ O ₂)	135.3	10.8	110.15	-2.7 (25%)

Toluene (C₇H₈) + Glycols.

Francis, 1944

2 nd comp.		C.S.T.			
Ethylene glycol (C ₂ H ₆ O ₂)		210			
Diethylene glycol (C ₄ H ₁₀ O ₃)		134			
Triethylene glycol (C ₆ H ₁₄ O ₄)		90			

Toluene (C₇H₈) + Methyl lactate (C₄H₈O₃)

Lecat, 1949

%	b. t.	Dt mix
0	110.75	
15	-	
-	110.6 Az	-2.5
100	143.8	

Toluene (C_7H_8) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

colour	(α)				
	50.234	25.177	12.5585	5.127	2.5635
	g/100cc				
	20°				
red	-4.58	-3.82	-2.23	-1.76	-1.17
Yellow	-4.98	-4.18	-2.71	-0.78	-0.39
green	-5.18	-4.26	-2.87	-0.00	-0.00
light blue	-5.28	-4.70	-3.03	+0.78	+1.17
dark blue	-5.67	-4.66	-2.47	+1.37	+1.95
violet	-6.17	-	-	+1.95	-

Toluene (C_7H_8) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson, 1902

t	d	t	d
0%		2.005%	
18.77	0.86616	20.72	0.86898
19.75	0.86525	26.52	0.86362
21.03	0.86406	31.02	0.85941
24.15	0.86114		
28.65	0.85699		
5.01847%		9.98097%	
20.15	0.87674	19.8	0.92834
21.16	0.87579	28.24	0.92165
26.89	0.87043	44.9	0.90534
37.05	0.86086	48.85	0.90138
41.65	0.85650		
24.9946%		49.1834%	
21.32	0.92834	18	1.00643
28.24	0.92165	27	0.99742
44.9	0.90534	45.8	0.9788
48.85	0.90138	62.3	0.9620
		82	0.9419
		99	0.9252
59.908%		69.9894%	
20.5	1.04092	19	1.07931
44.8	1.01692	34	1.06454
59.5	1.0021	49	1.0494
82.6	0.9791	77	1.0213
		99	0.9985
t	(α) _D	t	(α) _D
2.005%		5.01847%	
17	4.275	17	4.49
20.7	5.75	19	4.92
25	4.95	25.1	6.90
		28.9	6.51
		41	8.21
		45.4	8.78

9.98097%

24.9946%

16.5	4.28	16.8	4.12
19.2	4.80	20	4.66
25.3	5.70	24	5.28
40.5	7.86	31.2	6.44
52.8	9.41	43.3	8.12
58.9	10.36		

49.1834%

59.908%

15.1	4.12	16.1	4.65
16.8	4.38	17	4.83
17	4.40	27	6.27
33	6.95	41.2	8.15
38.5	7.69	45.7	8.64
41.8	8.11	50.4	9.20
46	8.61	62.8	10.44
49.4	8.97	68.7	10.95
56.6	9.68	75.4	11.47
62.5	10.17	82.6	12.05

Rule, Barnett and Cunningham, 1933

mol %

(α)₅₄₆₁

20°

3.8	+1.13
10.0	2.76
16.65	4.53
23.73	6.28
31.73	8.26
52.28	16.02
80.50	28.76

Toluene (C_7H_8) + Ethanolamine (C_2H_7ON)

Francis, 1944

C.S.T. = 137°

Toluene (C_7H_8) + Ethylenchlorhydrin ($C_2H_4OCl_2$)

Lecat, 1949

%	b.t.	Dt mix
0	110.75	
31	106.95	Az
50	-	
100	128.6	-3.7

Snyder and Gilbert, 1942

b.t.	mol%	
	L	V
120.4	96.7	77.0
113.9	92.0	63.0
108.4	72.5	41.6
107.6	59.1	35.7
107.0	37.8	30.1
106.9	23.3	25.4
107.8	10.8	17.5
109.2	3.4	8.2

Toluene (C_7H_8) + 1-chlor-2-propanol (C_3H_7OCl)

Lecat, 1949

%	b.t.	Dt mix
0	110.75	
10	-	
15	109.0	Az
100	127.0	-2.0

Toluene (C_7H_8) + Chloral hydrate ($C_2H_3O_2Cl_3$)

Speyers, 1902

f.t.	mol%
0	1.78
10.0	4.24
20.7	11.42
29.6	31.18
42.5	89.86

d
saturat. sol.

0.0	0.8978
18.5	0.9328
28.4	1.069
40.8	1.448
42.0	1.445

Rudolphi, 1909

%	d	n_D	n_D	n_D	n_D
		H_α	D	H_β	H_γ
20°					
0.0	0.86511	1.49159	1.50745	1.50745	-
0.2	0.86584	1.49155	1.49606	1.50742	-
2	0.87245	1.49141	1.49587	1.50720	-
5	0.88413	1.49139	1.49579	1.50715	-
10	0.90384	1.49133	1.49568	1.50688	-
20	0.95073	1.49181	1.49611	1.50695	-
40	1.07037	1.49353	1.49760	1.50793	-

%	d	n_D	n_D	n_D	n_D
		H_α	D	H_β	H_γ
44°					
0.0	0.84288	1.47914	1.48345	1.49458	1.50417
0.2	0.84351	1.47914	1.48328	1.49451	1.50390
2	0.84950	1.47902	1.48311	1.49451	1.50369
5	0.86069	1.47866	1.48276	1.49429	1.50323
10	0.87932	1.47840	1.48243	1.49346	1.50277
20	0.92480	1.47851	1.48241	1.49323	1.50234
40	1.04270	1.47979	1.48345	1.49362	1.50217
60	1.18594	1.48180	1.48520	1.49477	1.50248
100	1.6261	1.49089	1.49328	1.50028	-

Toluene (C_7H_8) + Cyclohexanol ($C_6H_{12}O$)

Wheeler and Jones, 1952

%	n_D	%	n_D
25°			
0	1.46472	51.18	1.47680
8.35	1.46641	59.60	1.47918
13.57	1.46753	69.19	1.48201
20.62	1.46992	80.81	1.48570
29.43	1.47124	91.37	1.48921
40.57	1.47401	100	1.49231

Toluene (C_7H_8) + Benzyl alcohol (C_7H_8O)

Hückel, Niesel and Buchs, 1944

t	σ			
	50	75	83	91
	mol%			
15	33.11	34.32	36.80	37.88
20	32.37	33.58	-	37.39
25	31.63	33.24	35.33	36.87
30	31.16	32.64	-	36.33
35	30.76	32.51	34.72	36.47
40	30.22	32.57	34.79	35.86
45	30.15	32.04	34.12	35.26
50	30.09	31.30	33.92	34.86
60	28.95	29.75	32.84	33.98

Toluene (C_7H_8) + Borneol ($C_{10}H_{18}O$)

Vanstone, 1909

%	(α) D	%	(α) D
20°			
13.23	+27.63	15.39	+27.12
13.37	27.07	18.38	28.00
14.54	27.57	21.79	28.14
15.06	26.87	27.80	29.01

Lecat, 1949

Ethyl benzene (C_8H_{10}) (b.t.=136.15) + Alcohols

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Butyl alcohol	$C_4H_{10}O$	117.8	68	115.5	-4.2 (67%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	79	107.5	-2.8 (80%)
Amyl alcohol	$C_5H_{12}O$	138.2	40	129.8	-2.9 (20%)
Isobutyl carbinol	$C_5H_{12}O$	131.9	48	126.3	-4.2 (50%)
2-Pentanol	$C_5H_{12}O$	119.8	67	118.0	-3.8 (50%)

Ethyl benzene (C_8H_{10}) + Diethylene glycol ($C_4H_{10}O_3$)

Francis, 1944

C.S.T. = 155°

Ethyl benzene (C_8H_{10}) + Triethylene glycol ($C_6H_{14}O_4$)

Francis, 1944

C.S.T. = 115°

Ethyl benzene (C_8H_{10}) + Ethanolamine (C_2H_7ON)

Francis, 1944

C.S.T. = 150°

Lecat, 1949

Ethyl benzene (C_8H_{10}) (b.t.=136.15) + varia

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Methoxy-glycol	$C_3H_8O_2$	124.5	55	118.8	-2.6
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	48	127.8	-1.7 (50%)
Propoxy-glycol	$C_5H_{12}O_2$	151.35	18	134.5	-1.5 (20%)
Methyl lactate	$C_4H_8O_3$	143.8	38	129.0	-6.6 (35%)
Ethanolamine	C_2H_7ON	170.8	15	131.0	-
Ethylen chlorhydrin	C_2H_5OC1	126.6	55	121.0	-3.5 (50%)
Ethylen bromhydrin	C_2H_5OBr	150.2	40	131.5	-3.5 (50%)

Ethyl benzene (C_8H_{10}) + 2-Ethoxyethanol
Kieffer and Grabiell, 1951 ($C_4H_{10}O_2$)
(fig.)

mol%		b. t.	mol%	
L	V	L	V	
0	0	50	48	
10	22	60	52	
20	33	70	58	
30	40	80	67	
40	45	90	81	
47.4	47.4	100	100	
mol %		b. t.		
0		134.9		
47.4		126.2	Az	
100		134.0		
mol%		n _D	mol%	n _D
20°				
0	1.4957	60	1.4472	
10	1.4874	70	1.4382	
20	1.4801	80	1.4287	
30	1.4726	90	1.4184	
40	1.4645	100	1.4080	
50	1.4560			

Fried, Pick and al., 1956.

mol% L	V	b. t.	P ₁	P ₂
50 mm				
100	100	64.5	68.8	50.0
94.6	83.8	61.7	59.7	44.1
91	75.3	60.3	56.2	41.2
89.2	72.8	59.6	54.5	39.8
83.6	63.8	58.0	50.8	36.8
74.4	54.4	56.3	47.0	33.4
73.5	53	56.2	46.8	33.6
70.2	51	55.8	46.0	32.9
70	50	55.7	45.8	32.7
47.7	37.6	54.2	42.7	30.3
34.5	33	53.9	42.2	29.9
33.5	32.8	53.9	42.2	29.9
25.4	28.7	54.1	42.5	30.1
24.6	28.2	54.1	42.5	30.1
18	25	54.7	43.7	31.1
17.6	24.5	54.7	43.7	31.1
15.8	23.8	54.9	44.1	31.5
12.6	21	55.3	44.9	32.1
0	0	57.8	50.0	37.1

mol%	N _D
20°	
100	1.4080
91.9	1.4165
74.9	1.4332
55.9	1.4507
35.4	1.4680
12.6	1.4859
0	1.4957

Propyl benzene (C_9H_{12}) (b. t. = 159.3) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	45	152.7	-
Glycol	$C_2H_6O_2$	197.4	19	152.0	-
Pinacol	$C_6H_{14}O_2$	174.35	28	156.3	-
Methoxy glycol	$C_3H_8O_2$	124.5	82	124.0	-2.1 (80%)
Ethoxy glycol	$C_4H_{10}O_2$	135.3	80	134.6	-0.8 (90%)
Propoxy glycol	$C_5H_{12}O_2$	151.35	62	147.8	-2.2 (50%)
Butoxy glycol	$C_6H_{14}O_2$	171.15	50	158.0	-2.8 (50%)
Methyl lactate	$C_4H_8O_3$	143.8	73	140.0	-5 (80%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	58	148.0	-4.0 (60%)
Cyclohexanol	$C_6H_{12}O$	160.8	40	154.2	-3.5 (40%)
Ethylene chlorhydrin	C_2H_5OC1	128.6	76	127.0	-2.7 (80%)
Dichlor ethanol	$C_2H_4OC1_2$	146.2	75	143.5	-
1-3-Dichloropropanol	$C_3H_6OC1_2$	175.8	20	157.5	-
Iodethanol	C_2H_5OI	176.5	30	155.0	-
Ethanol-amine	C_2H_7ON	170.8	30	147.0	-

Francis, 1944

Isopropyl benzene (C_9H_{12}) + Alcohols.

2nd comp.	C.S.T.
Diethylene glycol ($C_4H_{10}O_3$)	137
Triethylene glycol ($C_6H_{14}O_4$)	137
Furfuryl alcohol ($C_5H_6O_2$)	-50

Lecat, 1949

Isopropyl benzene (C_9H_{12}) (b.t. = 152.8) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	35	149.5	-4.0 (30%)
Glycol	$C_2H_6O_2$	197.4	18	147.0	-
Cyclohexanol	$C_6H_{12}O$	160.8	28	150.0	-3.8 (50%)
Methyl-cyclo-hexanol	$C_7H_{14}O$	168.5	12	151.7	-
Methyl lactate	$C_4H_8O_3$	143.8	62	137.8	-6.0 (50%)
Methoxy glycol	$C_3H_8O_2$	124.5	73.5	122.4	-1.5 (90%)
Ethoxy glycol	$C_4H_{10}O_2$	135.3	67	133.2	-1.8 (50%)
Propoxy glycol	$C_5H_{12}O_2$	151.35	50	147.0	-
Ethyl lactate	$C_6H_{12}O_3$	154.1	46	144.5	-3.0 (80%)
Ethylene chlorhydrin	(C_2H_5OCl)	128.6	70	125.35	-3.0 (75%)
Dichlor-ethanol	($C_2H_4OCl_2$)	146.2	65	142.0	-
1,3-Dichlor-propanol	($C_3H_6OCl_2$)	175.8	-	152.5	-
Ethanol-amine	(C_2H_7ON)	170.8	-	142.5	-

Isopropyl benzene (C_9H_{12}) + Furfuryl alcohol
($C_5H_6O_2$)

Francis, 1944

C.S.T. = -50°

Isopropyl benzene (C_9H_{12}) + 2-Ethoxyethanol
($C_4H_{10}O_2$)

Kieffer and Grabiell, 1951

%		b.t.	
0		151.1	
67.5		132.0	Az
100		134.0	

mol%	n_D	mol%	n_D
20°			
0	1.4912	60	1.4470
10	1.4844	70	1.4386
20	1.4776	80	1.4298
30	1.4706	90	1.4194
40	1.4632	100	1.4080
50	1.4553		

Isopropyl benzene (C_9H_{12}) + 2-Butoxyethanol
($C_6H_{14}O_2$)

Kieffer and Holroyd, 1955

wt%	mol%	b.t.	n_D
20°			
0	0	152.4	1.4916
10.3	10.5	151.7	1.4834
100	100	171.2	1.4196

Butyl benzene ($C_{10}H_{14}$) (b.t.=183.1) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Isooctyl alcohol	$C_8H_{18}O$	180.4	50	178.2	-
Glycol	$C_2H_6O_2$	197.4	27	166.2	-
Glycerol	$C_3H_8O_3$	290.5	-	182.9	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	80	170.2	-2.3 (70%)
Methyl diglycol	$C_5H_{12}O_3$	192.95	35	176.5	-1.5 (20%)
Ethoxy glycol	$C_4H_{10}O_2$	201.9	18	181.3	-1.5 (20%)
Glycol monoacetate	$C_4H_8O_3$	190.9	33	181.5	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	70	168.0	-
1,3-Dichloropropanol	$C_3H_5OCl_2$	175.8	65	172.0	-
Ethanol-amine	C_2H_7ON	170.8	48	158.5	-

Butyl benzene ($C_{10}H_{14}$) + 2-Butoxyethanol
($C_6H_{14}O_2$)

Kieffer and Holroyd, 1955

wt%	mol%	b. t.	n_D^{20}
0	0	183.4	1.4902
73.4 Az	75.5	169.6	1.4395
100	100	171.2	1.4196

sec. Butyl benzene ($C_{10}H_{14}$) + varia

Francis, 1944

2nd comp.	C.S.T.
Diethylene glycol ($C_4H_{10}O_3$)	191
Triethylene glycol ($C_6H_{14}O_4$)	156
Furfuryl alcohol ($C_5H_6O_2$)	-22
Phenyl ethanolamine ($C_8H_{11}ON$)	below -10

sec. Butyl benzene ($C_{10}H_{14}$) + 2-Butoxyethanol
($C_6H_{14}O_2$)

Kieffer and Holroyd, 1955

wt%	mol%	b. t.	n_D^{20}
0	0	173.3	1.4902
47.9 Az	51.2	166.0	1.4561
100	100	171.2	1.4196

tert. Butyl benzene ($C_{10}H_{14}$) + Alcohols.
Francis, 1944

2nd comp.	C.S.T.
Diethylene glycol ($C_4H_{10}O_3$)	189
Triethylene glycol ($C_6H_{14}O_4$)	153
Furfuryl alcohol ($C_5H_6O_2$)	-32

tert. Butyl benzene ($C_{10}H_{14}$) + 2-Butoxyethanol
($C_6H_{14}O_2$)

Kieffer and Hobroyd, 1955

wt%	mol%	b. t.	n_D^{20}
0	0	169.1	1.4925
39.1 Az	42.2	164.4	1.4635
100	100	171.2	1.4196

sec. Amyl benzene ($C_{11}H_{16}$) + Alcohols

Francis, 1944

2nd Comp.		C.S.T.
Methyl alcohol	CH_4O	- 6
Furfuryl alcohol	$C_5H_6O_2$	11
Salicyl alcohol	$C_7H_8O_2$	104
Diethylene glycol	$C_4H_{10}O_3$	210
Triethylene glycol	$C_6H_{14}O_4$	178
Phenyl ethanolamine	$C_8H_{11}ON$	23
Ethylene chlorhydrin	C_2H_5OC1	-22

Styrene (C_8H_8) (b.t.=145.8) + Alcohols

Lecat, 1949

	2nd Comp.	Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyl alcohol	C ₄ H ₁₀ O	117.8	80	117.2	-
Isobutyl carbinol	C ₅ H ₁₂ O	131.9	63	128.9	-2.7 (66%)
Hexyl alcohol	C ₆ H ₁₄ O	157.85	23	144	-
Glycol	C ₂ H ₆ O ₂	197.4	17	141.5	-
Methoxy glycol	C ₃ H ₈ O ₂	124.5	62	141.0	-
Ethoxy glycol	C ₄ H ₁₀ O ₂	135.3	55	130.0	-
Propoxy glycol	C ₅ H ₁₂ O ₂	151.35	37	140.5	-
Methyl lactate	C ₄ H ₈ O ₃	143.8	52	134.0	-6.5 (50%)
Ethyl lactate	C ₅ H ₁₀ O ₃	154.1	33	140.5	-2.0 (25%)
Cyclo-hexanol	C ₆ H ₁₂ O	160.8	16	144.4	-
Ethylene chlorhydrin	C ₂ H ₅ OC1	128.6	60	123.2	-
Dichlor-ethanol	C ₂ H ₄ OC1 ₂	146.2	-	140.0	-

Styrene (C_8H_8) + 2-Ethoxyethanol ($C_4H_{10}O_2$)

Fried, Pick and al., 1956

mol% L	V	b. t.	P ₂	P ₁
50 mm				
0.0	0.0	65.6	53.0	50.0
8.3	20.0	63.1	47.2	44.7
15.0	27.8	61.8	44.3	42.2
20.5	31.8	61.0	42.6	40.8
38.3	42.0	59.9	40.4	38.8
48.2	46.8	60.0	40.6	38.9
62.8	55.5	60.5	41.6	39.8
78.0	68.3	61.5	43.7	41.7
84.8	75.5	62.1	45.0	42.8
93.5	87.5	63.5	48.1	45.5
96.8	93.4	64.2	49.7	47.0
100.0	100.0	64.5	50.0	47.8

Styrene (C_8H_8) + Alcohols

Francis, 1944

2 nd comp.	C.S.T.
Diethylene ($C_4H_{10}O_3$) glycol	111 37
Triethylene ($C_6H_{14}O_4$) glycol	115°
Ethanolamine (C_2H_7ON)	
Triethanolamine ($C_6H_{15}O_3N$)	180°

o-Xylene (C_8H_{10}) + Methyl alcohol (CH_4O)

Kafarov and Gordievskii, 1956 (fig.)

mol%		mol%	
L	V	L	V
b. t.			
14	90	50	93.5
20	91	60	94
30	92.5	80	94
%	n _D	%	n _D
20°			
0	1.5047	75	1.368
25	1.460	100	1.3288
50	1.415		

Shakhparanov and Shlenkina, 1954

mol%	n_D^{20}	I (19-20°)	d (19-20°)
0	1.50475	3.83	0.557
16	-	4.00	0.434
30	1.48311	6.12	0.206
41	1.47482	9.00	0.124
51	-	11.9	0.087
65	1.43719	10.2	0.073
80	1.40319	6.30	0.086
100	1.32846	0.56	0.070

I = relative intensity of the molecular light dispersion.

d = degree of the optical depolarisation.

Lecat, 1949

o-Xylene (C_8H_{10}) (b.t.=144.3) + Alcohols.

2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix.
Hexyl alcohol	(C ₆ H ₁₄ O)	157.85	20	143.1	-
Glycol	(C ₂ H ₆ O ₂)	197.4	16	140.0	-
Methoxy glycol	(C ₃ H ₈ O ₂)	124.5	63	121.0	-2.3 (65%)
Ethoxy glycol	(C ₄ H ₁₀ O ₂)	135.3	55	130.8	-1.3 (80%)

o-Xylene (C_8H_{10}) + 2-Ethoxyethanol ($C_4H_{10}O_2$)

Kieffer and Grabiell, 1951

mol%	n_D^{20}	mol%	n_D^{20}
0	1.5044	60	1.4501
10	1.4949	70	1.4402
20	1.4862	80	1.4300
30	1.4779	90	1.4189
40	1.4690	100	1.4080
50	1.4598		

mol%		mol%	
L	V	L	V
b.t.			
0	0	60	61
10	28	70	65
20	39	80	74
30	45	90	86
40	52	100	100
50	58		

%		b.t.	
0		143.1	
57.2		129.6 Az	
100		134.0	

o-Xylene (C_8H_{10}) (b.t. = 144.3) + Alcohols
Lecat, 1949

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Propoxy glycol	(C ₅ H ₁₂ O ₂)	151.35	35	140.3	-1.9
Methyl lactate	(C ₄ H ₈ O ₃)	143.8	50	133.5	-5.8 (75%)
Ethyl lactate	(C ₅ H ₁₀ O ₃)	154.1	30	140.2	-4.0
Cyclo-hexanol	(C ₆ H ₁₂ O)	160.8	13	143.3	-4.3 (50%)
Ethylene chlorhydrin	C ₂ H ₅ OC1	128.6	60	123.6	-2.7 (80%)
1-Chlor-2-propanol	C ₃ H ₇ OC1	127.0	85	125.5	-
2-Chlor-1-propanol	C ₃ H ₇ OC1	133.7	70	130.5	-2.5 (80%)
Dichlor ethanol	C ₂ H ₄ OC1 ₂	146.2	50	139.0	-3.0 (30%)
Ethylene bromhydrin	C ₂ H ₅ OBr	150.2	43	133.5	-3.0 (30%)
Ethylene iodhydrin	C ₂ H ₅ OI	176.5	10	143.5	-
Ethanolamine	C ₂ H ₇ ON	170.8	20	138.0	-

o-Xylene (C_8H_{10}) + Ethyl tartrate ($C_8H_{14}O_6$)
Patterson, 1902

t	d	t	d
0%		2.0035%	
19.12	0.880776	19.2	0.88508
22.44	0.877938	23.1	0.88179
28.93	0.872521	31.7	0.87451
36.34	0.866286		
4.99945%		7.81793%	
19.21	0.89194	19.5	0.89854
24.37	0.88750	30.52	0.88907
27.96	0.88445		
33.47	0.87975		
9.96165%		25.0067%	
19.23	0.903701	18.97	0.94251
24.85	0.898829	27.05	0.93517
31.66	0.892909	37.76	0.92543
35.85	0.889362		
49.9946%		74.9896%	
18.86	1.01572	18.75	1.10244
27.77	1.00718	31.27	1.08998
41.90	0.99368	45.58	1.0758
t	α_D	t	α_D
2.0035%		4.99945%	
11.9	1.97	13	2.75
20.7	3.39	18.9	3.81
31.3	5.06	22	4.27
7.81793%		9.96165%	
		25.6	4.82
		35.8	6.38
17.5	3.52	37.2	6.50
21.2	4.15		
25.0067%		74.9896%	
		12.1	2.54
		15.0	3.03
17.8	3.28	17.4	3.51
19.6	3.59	19.0	3.75
25.1	4.53	24.9	4.70
37.5	6.59	30.0	5.52
40.9	7.09	33.6	6.05
		36.7	6.53
49.9946%		74.9896%	
14.2	3.45		
16.9	3.98	12.3	4.57
19.7	4.50	18.1	5.46
26.6	5.53	22.5	6.12
35	6.81	35.3	7.83

m-Xylene (C_8H_{10}) + Methyl alcohol (CH_3O)

Francis, 1944

C.S.T. below -78°

Teitelbaum, Gortalova and Ganelina, 1950

mol%	d	η
20°		
0	0.8656	627
20	0.8603	622
40	0.8524	636
50	0.8480	646
60	0.8412	662
70	0.8350	654
80	0.8264	641
100	0.7923	578

m-Xylene (C_8H_{10}) + Propyl alcohol (C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	139.2	
94	97.08	Az
52	-	
100	97.2	-3.4

m-Xylene (C_8H_{10}) + Butyl alcohol ($C_4H_{10}O$)

Jahn and Möller, 1894

%	t	d	ϵ
100	14	0.80717	19.294
62.907	13.5	0.82883	11.365
40.018	13.5	0.84303	6.5243
18.398	13	0.85765	3.3742
10.234	13	0.86298	2.7925
0	13.5	-	2.3518

Ryland, 1899

%	b. t.
0	136 - 137
52	125 - 126
100	95 - 96

Lecat, 1949

m-Xylene (C_8H_{10}) (b.t.=139.2) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Butyl alcohol	($C_4H_{10}O$)	117.8	71.5	116.5	-3.1 (48%)
Isobutyl alcohol	($C_4H_{10}O$)	108.0	85.5	107.78	-4.5 (50%)
Isobutyl carbinol	($C_5H_{12}O$)	131.9	53	127.1	-3.4 (50%)

m-Xylene (C_8H_{10}) + Amyl alcohol ($C_5H_{12}O$)

Jahn and Möller, 1894

%	t	d	ε
100	14.3	0.81593	15.96
74.212	14.6	0.82782	11.27
45.104	14.7	0.84297	5.9024
20.298	14.8	0.85675	3.1540
10.985	15	0.86205	2.713
100	15.1	0.81535	15.925
70.077	14	0.82990	10.694
45.196	14	0.84309	5.9942
24.148	14	0.85573	3.4523
12.048	14	0.86294	2.7647
0	14.6	-	2.3497

m-Xylene (C_8H_{10}) + Nonyl alcohol ($C_9H_{20}O$)

Chu, Kharbanda and al., 1954

b.t.	mol%	
	L	V
	753mm	
179	86.5	63.0
168	75.5	40.0
159	59.0	25.0
151.5	43.0	14.5
146	29.0	8.5
142	13.0	4.0

m-Xylene (C_8H_{10}) + Diethylene glycol ($C_4H_{10}O_3$)

Francis, 1944

C.S.T. = 162°

m-Xylene (C_8H_{10}) + Triethylene glycol ($C_6H_{14}O_4$)

Francis, 1944

C.S.T. = 120°

Lecat, 1949

m-Xylene (C_8H_{10}) (b.t. = 139.2) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methoxy glycol	$C_3H_8O_2$	134.5	58	119.5	-2.7 (50%)
Ethoxy glycol	$C_4H_{10}O_2$	135.3	51	128.85	-
Propoxy glycol	$C_5H_{12}O_2$	151.35	25.5	136.95	-2.0 (50%)
Methyl lactate	$C_4H_8O_3$	143.8	42.5	131.2	-6.0 (25%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	19.5	137.4	-3.1 (24%)
Cyclo-pentanol	($C_5H_{10}O$)	140.85	40	132.8	-2.7 (30%)
Cyclo-hexanol	($C_6H_{12}O$)	160.8	5	139.1	-3.1 (17%)

m-Xylene (C_8H_{10}) + 2-Ethoxyethanol ($C_4H_{10}O_2$)

Kieffer and Grabiell, 1951

%		b. t.	
0		137.9	
48.9		127.7	Az
100		134.0	

mol%	n_D	mol%	n_D
20°			
0	1.4971	60	1.4481
10	1.4883	70	1.4389
20	1.4808	80	1.4294
30	1.4729	90	1.4188
40	1.4650	100	1.4088
50	1.4565		

m-Xylene (C_8H_{10}) + Methyl malate 1 ($C_6H_{10}O_5$)

Grosman and Landau, 1910

t	d	t	d
5.09721%		10.0017%	
18.4	0.87719	18.80	0.88894
26.88	0.86979	25.05	0.88335
33.89	0.86371	31.20	0.877943
18.8179%		33.1227%	
18.01	0.91270	17.66	0.95333
25.24	0.90621	25.23	0.94626
32.27	0.89993	30.26	0.94164
39.9859%		59.975%	
17.8	0.97425	21.6	1.0371
29	0.96369	45	1.0150
50.2	0.94403	68	0.9923
70	0.9255	100	0.9605
100	0.8969		
74.0857			
18.18	1.09323		
25.00	1.0865		
39.12	1.0724		

colour	(α) g/100cc			
	50.097	25.0485	12.5243	4.735 2.3675

20°				
red	-4.59	-3.87	-2.40	-2.11 -1.69
yellow	-5.19	-4.47	-2.95	-2.75 -2.11
green	-6.09	-4.87	-3.27	-2.11 -1.69
light blue	-6.99	-5.27	-3.43	-1.48 -1.27
dark blue	-7.29	-5.47	-3.59	-1.06 -0.84
violet	-7.69	-	-	-0.42 -

m-Xylene (C_8H_{10}) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson, 1902

t	d	t	d
0%		1.99881%	
21.37	0.86285	18.42	0.86981
24.15	0.86039	26.08	0.86321
31.25	0.85427	30.42	0.85948
42.10	0.84484		
2.41204%		5.00318%	
18.35	0.87091	17.3	0.877942
26.60	0.86373	23.69	0.872386
33.75	0.85763		

t	$(\alpha)_D$	t	$(\alpha)_D$
1.99881%		2.41204%	
8.7	0.38	17	2.28
19.2	2.36	19	2.60
30.7	4.40	25.2	3.68
5.00318%		5.09721%	
7.9	1.08	7.8	1.20
15.2	2.46	15.1	2.58
25.2	3.57	24.3	4.22
10.0017%		18.8179%	
11.8	1.97	10.5	1.73
13.7	2.43	18.5	3.34
18.8	3.35	19.2	3.33
24.7	4.39	23.3	4.14
31.1	5.39		
33.1227%		39.9859%	
16.2	3.43	16	3.62
22.2	4.33	16.8	3.69
		20	4.32
59.975%		26.2	5.31
17	4.57	27.5	5.54
20	5.05	39	7.19
27.9	6.17	59.7	9.63
42.1	8.09	64.5	10.09
49	8.83	71.2	10.69
53.8	9.33	76.1	11.14
58	9.76	79.1	11.38
65.1	10.42	100	12.78
72.7	11.07		
84	11.98		
100	13.00		
		74.0857%	
		10	4.30
		18.9	5.71
		20.9	5.93
		26	6.64
		32.3	7.36

m-Xylene (C_8H_{10}) + Tetrahydrofurfuryl alcohol
($C_5H_{10}O_2$)

Chu and Kharbanda, 1954

t	mol%	
	L	V
746mm		
169	92.3	69.7
158	85.0	40.4
151	69.0	27.3
145	51.6	20.2
141.8	33.0	14.5
139.5	15.0	7.6

Lecat, 1949

m-Xylene (C_8H_{10}) (b.t. = 139.2) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Ethylenchlorhydrin	C_2H_5OCl	128.6	54.5	121.9	-3.4 (50%)
1-Chlor-2-propanol	C_3H_7OCl	127.0	75	124.5	-3.5 (50%)
2-Chlor-1-propanol	C_3H_7OCl	133.7	53	129.0	-3.3 (50%)
Dichloroethanol	$C_2H_4OCl_2$	146.2	32	136.0	-
Ethylene bromhydrin	C_2H_5OBr	150.2	43	133.5	-3.0 (30%)
Ethanolamine	C_2H_7ON	170.8	18	133.0	-
Diethyl ethanol-amine	$C_6H_{11}ON$	162.2	8	136.0	-

p-Xylene (C_8H_{10}) + Ethyl alcohol (C_2H_6O)

Paterno and Montemartini, 1894

%	f. t.
0	13.23
0.31	12.96
1.22	12.46
2.43	12.065
3.87	11.76
7.22	11.24
13.58	10.50
20.95	9.835

Lecat, 1949

p-Xylene (C_8H_{10}) (b.t.=138.45) + Alcohols.

2nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propyl alcohol	(C_3H_8O)	97.2	-	97.0	-1.3 (90%)
Butyl alcohol	($C_4H_{10}O$)	117.8	71	116.2	-
Isobutyl alcohol	($C_4H_{10}O$)	108.0	83	107.6	-1.6 (90%)

p-Xylene (C_8H_{10}) + Isobutyl alcohol ($C_4H_{10}O$)

Paterno and Montemartini, 1894

%	f. t.
0	13.23
0.36	13.02
0.99	12.705
2.26	12.25
4.33	11.765
9.94	10.785
18.96	9.56

Lecat, 1949

p-Xylene (C_8H_{10}) (b. t. = 138.45) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Amyl alcohol	$C_5H_{12}O$	138.2	42	131.3	-2.7 (20%)
Glycol	$C_2H_6O_2$	197.4	14.5	135.2	-
Ethoxyglycol	$C_4H_{10}O_2$	135.3	50	128.6	-
Propoxy glycol	$C_5H_{12}O_2$	151.35	24	136.3	-1.5 (20%)
Methyl lactate	$C_4H_8O_3$	147.8	42	130.2	-6.8 (40%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	17	136.6	-2.8

p-Xylene (C_8H_{10}) + Trimethylcarbinol ($C_4H_{10}O$)

Paterno and Montemartini, 1894

%	f.t.	%	f.t.
100	18.79	45.203	3.375
98.290	17.35	40.983	4.33
96.172	15.74	37.338	5.36
92.025	12.66	32.634	6.265
87.941	9.88	26.676	7.235
83.970	7.175	19.422	8.755
77.770	4.205	15.793	9.420
71.487	+0.415	12.764	9.96
67.992	-0.61	8.645	10.71
64.465	-1.80	6.002	11.27
59.909	-0.97	3.964	11.73
57.683	-0.63	3.999	11.97
54.670	+0.42	1.434	12.475
53.739	1.10	1.447	12.94
51.650	1.74	0	13.18

Paterno and Montemartini, 1894

f.t.	%	f.t.	%
13.23	0	11.32	6.00
12.99	0.44	10.76	8.65
12.525	1.43	10.01	12.76
12.02	3.00	9.47	15.74
11.78	3.97	7.285	27.65

p-Xylene (C_8H_{10}) + Nonyl alcohol ($C_9H_{20}O$)

Chu and Kharbanda, 1954

b.t.	mol%	
	L	V
753mm		
178	84	58
168	72	34.5
160	58	23.0
151	41	13.5
146	27.5	8.0
141	12	3.0

p-Xylene (C_8H_{10}) + 2-Ethoxyethanol ($C_4H_{10}O_2$)

Kieffer and Grabiell, 1951

mol%		b.t.	
0		137.4	
52.0		127.3	Az
100		134.0	
mol%	n_D^{20}	mol%	n_D^{20}
0	1.4960	60	1.4475
10	1.4882	70	1.4385
20	1.4807	80	1.4289
30	1.4729	90	1.4185
40	1.4648	100	1.4080
50	1.4564		

p-Xylene (C_8H_{10}) + Glycerol diethyl ether($C_7H_{16}O_3$)

Paterno and Montemartini, 1894

%	f.t.	%	f.t.
0	13.23	8.84	11.21
0.47	13.05	12.33	10.52
1.89	12.64	16.00	9.85
3.36	12.365	21.01	8.90
6.56	11.63		

p-Xylene (C_8H_{10}) + Methyl malate I ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

colour		(α)			
50.221	25.1105	12.5553	4.856	2.428	
g/100cc					
20°					
red	-4.48	-3.78	-2.97	-2.68	-2.47
yellow	-4.98	-4.34	-2.95	-2.88	-2.88
green	-5.58	-4.70	-3.03	-3.09	-2.88
light blue	-6.47	-5.06	-3.11	-3.09	-2.06
dark blue	-6.67	-5.18	-3.27	-2.47	-1.65
violet	-6.97	-	-	-2.06	-

p-Xylene (C_8H_{10}) + Ethyl tartrate ($C_8H_{14}O_6$)
Patterson, 1902

t	d	t	d
0%		2.0007%	
19.50	0.86134	18.8	0.86657
25.50	0.85613	23.22	0.86273
33.30	0.84939	30.33	0.85654
40.65	0.84294		
4.99588%		10.0955%	
18.1	0.87438	17.95	0.88726
25.9	0.86753	21.96	0.88368
37.27	0.85746	28.35	0.87800
		42.97	0.86984
24.9849%		50.0899%	
18.42	0.92694	18.59	1.0044
24.08	0.92171	26.86	0.9964
31.0	0.91537	35.80	0.9877
		43.21	0.9805
74.9913%			
18.43	1.0958		
27.23	1.0871		
34.75	1.0795		

α	(α) _D	t	(α) _D
2.0007%		4.99588%	
10	-0.46	10	+0.11
15.9	+0.29	16	1.22
23.7	2.03	22.9	2.57
29.9	3.05		
10.0955%		24.9849%	
9.9	+0.61	10.5	+1.24
17.8	2.07	15.1	2.09
18.9	2.27	21.8	3.28
20.8	2.64	32.6	5.24
29.8	4.26		
45.7	6.57	50.0899%	
52.9	7.53	10.8	+2.63
59.1	8.34	17.9	3.84
74.9913%		23.2	4.71
		39.6	7.26
9.5	+3.97		
16.4	5.01		
16.7	5.04		
21.1	5.68		
22.1	5.78		
31.7	7.11		

p-Xylene (C_8H_{10}) + Benzyl alcohol (C_7H_8O)

Paterno and Montemartini, 1894

%	f. t.	%	f. t.
0	12.23	9.79	11.245
0.44	13.03	12.42	10.905
2.04	12.44	15.35	10.57
3.38	12.21	20.58	9.98
6.37	11.69		

p-Xylene (C_8H_{10}) + p-Xylenol ($C_8H_{10}O$)

Paterno, 1895

%	f. t.	%	f. t.
0	13.445	4.3313	12.16
0.4757	13.255	5.6585	11.86
1.3334	12.96	7.6876	11.39
2.0509	12.795	12.2243	10.45
4.1393	12.18	16.9112	9.625

p-Xylene (C_8H_{10}) + Tetrahydrofurfuryl alcohol
($C_5H_{10}O_2$)

Chu and Kharbada, 1954

b. t.	mol%	
	L	V
746 mm		
169.5	95.5	80.2
158.8	82.3	41.3
151.1	78.8	34.2
144	53.6	23.0
141.2	36.7	20.0
139	20.0	13.6

p-Xylene (C_8H_{10}) + Ethylenchlorhydrin ($C_2H_4OCl_2$)

Lecat, 1949

%	b. t.	Dt mix
0	138.45	
54	121.5	Az
60	-	
100	128.6	-3.2

p-Xylene (C_8H_{10}) + Ethylenbromhydrin ($C_2H_4OBr_2$)

Lecat, 1949

%	b. t.
0	138.45
42	133.0
100	150.2

Xylene (C_8H_{10}) + Ethyl alcohol (C_2H_6O)

Jahn, 1891

%	d	(α) magn.
	20°	
100	0.79009	84.77
69.60	0.81137	114.18
0	0.86491	188.78

Cohn and Arons, 1888

%	ϵ	%	ϵ
at room temperature			
0	2.36	40	9.53
9	3.08	50	13.0
17	3.98	100	26.5

Campbell, 1913

%	$\kappa \cdot 10^{10}$	τ
	25.6°	15°
100	69500	+0.0027
25	4470	-0.0117
20	1000	-
18	531	-
16	281	-
14	144	-
12	57.7	-
10	16.8	-0.0168
9	8.50	-
8	3.76	-
7	1.60	-
6	0.592	-
5	0.212	-0.0124
4	0.0708	-
0	lower than 0.00001	-

Xylene (C_8H_{10}) + Butyl alcohol ($C_4H_{10}O$)

Robinson, Wright and Bennett, 1932

Az

mol%	b. t.
62.4	20.0
52.8	40.0
43.6	60.0
35.0	80.0
20.7	115.0

Xylene (C_8H_{10}) + Amyl alcohol ($C_5H_{12}O$)

Clarke, 1905

%	Q mix (cal/g)
72.7	0.91
64.8	1.25
53.1	1.53
46.5	1.62
39.2	1.57
20.6	1.07

Francis, 1944

Methylethylbenzene (C_9H_{12}) + Alcohols.2nd comp. C. S. T.

Methyl alcohol (CH_3O)	-78°
Diethylene glycol ($C_4H_{10}O_3$)	176°
Triethylene glycol ($C_6H_{14}O_4$)	138°

Francis, 1944

Diethylbenzene ($C_{10}H_{14}$) + Alcohols.2nd comp. C. S. T.

Methyl alcohol (CH_3O)	-18°
Diethylene glycol ($C_4H_{10}O_3$)	193
Triethylene glycol ($C_6H_{14}O_4$)	160
Furfuryl alcohol ($C_5H_6O_2$)	-16

p-Cymene ($C_{10}H_{14}$) (b.t.=176.7) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	
Heptyl alcohol	$C_7H_{16}O$	176.15	47	172.5	-
Isooctyl alcohol	$C_8H_{18}O$	180.4	40	175.2	-
Glycol	$C_2H_6O_2$	197.4	25	163.2	-
Pinacol	$C_6H_{14}O_2$	174.35	50	167.7	-
Butoxy glycol	$C_6H_{14}O_2$	171.15	60	168.0	-2.5 (60%)
Methoxy diglycol	$C_5H_{12}O_3$	192.95	27	172.0	-1.8 (20%)
Propyl lactate	$C_6H_{12}O_3$	171.7	62	167.0	-2.5 (50%)
Isobutyl lactate	$C_7H_{14}O_3$	182.15	25	175.5	-2.0
Cyclohexanol	$C_6H_{12}O$	160.8	74	179.5	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	68	166.5	-

p-Cymene ($C_{10}H_{14}$) + 2-Butoxyethanol ($C_6H_{14}O_2$)

Kieffer and Holroyd, 1955

wt%	mol%	b.t.	n_D^{20}
0	0	177.2	1.4902
56.6	59.7	167.4 Az	1.4502
100	100	171.2	1.4196

p-Cymene ($C_{10}H_{14}$) + Terpineol ($C_{10}H_{18}O$)

Brauer, 1929

wt%	mol%	b.t. (10 mm.)
0	0	97.2
10	11.3	86
30	33.0	73
50	53.5	60
70	72.8	58
90	91.2	57
100	100	56.9

p-Cymene ($C_{10}H_{14}$) (b.t.=176.7) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
2,3-Dichloropropanol	($C_3H_6OCl_2$)	175.8	55	171.0	-3.6
1,2-Dichloropropanol	($C_3H_6OCl_2$)	182.5	42	172.5	-
Ethanolamine	(C_2H_7ON)	170.8	37	154.5	-

Cymene ($C_{10}H_{14}$) + Alcohols

Francis, 1944

2 nd comp.	C.S.T.
Methyl alcohol (CH_3O)	-18°
Diethylene glycol ($C_4H_{10}O_2$)	194
Triethylene glycol ($C_6H_{14}O_3$)	161

Methyldiethylbenzene ($C_{11}H_{16}$) + Alcohols

Francis, 1944

2 nd Comp.	C.S.T.
Methyl alcohol (CH_3O)	10
Furfuryl alcohol ($C_5H_6O_2$)	2
Diethylene glycol ($C_4H_{10}O_3$)	207
Triethylene glycol ($C_6H_{14}O_4$)	172
Phenylethanolamine ($C_8H_{11}ON$)	5
Ethylene chlorhydrine (C_2H_5OCl)	-50

Francis, 1944

Ethylisopropyl benzene ($C_{11}H_{16}$) + Alcohols

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	-5
Diethylene glycol ($C_4H_{10}O_3$)	213
Triethylene glycol ($C_6H_{14}O_4$)	177
Furfuryl alcohol ($C_5H_6O_2$)	2
Phenylethanolamine ($C_8H_{11}ON$)	27
Ethylene chlorhydrin (C_2H_5OCl)	-60

Francis, 1944

Diisopropylbenzene ($C_{12}H_{18}$) + Alcohols

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	9
Diethylene glycol ($C_4H_{10}O_3$)	219
Triethylene glycol ($C_6H_{14}O_4$)	191
Furfuryl alcohol ($C_5H_6O_2$)	20
Phenylethanolamine ($C_8H_{11}ON$)	55
Ethylene chlorhydrin (C_2H_5OCl)	-5

Francis, 1944

Diamylbenzene ($C_{16}H_{26}$) + Alcohols

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	76
Diethylene glycol ($C_4H_{10}O_3$)	262
Triethylene glycol ($C_6H_{14}O_4$)	234
Tetrahydrofurfuryl alcohol ($C_5H_{10}O_2$)	12
Furfuryl alcohol ($C_5H_6O_2$)	82
Phenylethanolamine ($C_8H_{11}ON$)	-113
Ethylphenylethanolamine ($C_{10}H_{15}ON$)	27
Ethylene chlorhydrin (C_2H_5OCl)	70

Pseudocumene (C_9H_{12}) + Methyl alcohol (CH_4O)

Francis, 1944

C.S.T. = -26

Pseudocumene (C_9H_{12}) (b.t.=168.2) + Alcohols

Lecat, 1949

2nd Comp. Az

Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	66	156.2	-1.4 (70%)
Glycol	$C_2H_6O_2$	197.4	17.5	157.7	-
Pinacol	$C_6H_{14}O_2$	174.35	38	162.9	-

Pseudocumene (C_9H_{12}) + Alcohols.

Francis, 1944

2nd comp. C.S.T.

Diethylene glycol ($C_4H_{10}O_3$)	187
Triethylene glycol ($C_6H_{14}O_4$)	152
Furfuryl alcohol ($C_5H_6O_2$)	-11

Pseudocumene (C_9H_{12}) (b.t.=168.2) + Alcohols

Lecat, 1949

2nd Comp. Az

Name	Formula	b. t.	%	b. t.	Dt mix
Cyclohexanol	$C_6H_{12}O$	160.8	57	157.8	-3.2 (60%)
Methylcyclohexanol	$C_7H_{14}O$	168.5	48	164	-
Methyl lactate	$C_4H_8O_3$	143.8	90	143.0	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	74	152.3	-1.5 (81%)
Propyl lactate	$C_6H_{12}O_3$	172.7	38	163.5	-

Mesitylene (C_9H_{12}) + Methyl alcohol (CH_4O)

Teitelbaum, Gortalova and Ganelina, 1950

mol%	d	η
20°		
0	0.8626	705
20	0.8577	696
40	0.8531	699
50	0.8464	715
60	0.8401	721
80	0.8240	683
100	0.7923	578

Mesitylene (C_9H_{12}) + Ethyl alcohol (C_2H_6O)

Teitelbaum, Gortalova and Ganelina, 1950

mol%	d	η
20°		
0	0.8626	721
20	0.8548	718
40	0.8458	764
60	0.8343	854
80	0.8177	983
100	0.7903	1181

Mesitylene (C_9H_{12}) + Propyl alcohol (C_3H_8O)

Teitelbaum, Gortalova and Ganelina, 1950

mol%	d	η
20°		
0	0.8626	721
20	0.8577	748
40	0.8471	855
60	0.8371	1075
80	0.8253	1419
100	0.8050	2102

Mesitylene (C_9H_{12}) + Ethanol (C_2H_6O)

Kieffer and Grabiell, 1951

mol%	n_D^{20}	mol%	n_D^{20}
0	1.4975	60	1.4495
10	1.4892	70	1.4397
20	1.4817	80	1.4297
30	1.4744	90	1.4193
40	1.4667	100	1.4088
50	1.4584		

mol%		mol%	
L	V	L	V
at b.t.			
0	0	60	75
10	32	70	81
20	46	80	85
30	56	90	89
40	64	100	100
50	69		

%	b.t.
0	163.4
85.7	133.7 Az
(88.9 mol%)	
100	134.0

Mesitylene (C_9H_{12}) + 2-Butoxyethanol ($C_6H_{14}O_2$)

Kieffer and Holroyd, 1955

wt%	mol%	b.t.	n_D^{20}
0	0	164.6	1.4987
32.8	33.2	162.0 Az	1.4719
100	100	171.2	1.4196

Mesitylene (C_9H_{12}) (b.t. = 164.6) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	55	155.1	-1.7 (50%)
Glycol	$C_2H_6O_2$	197.4	17	155.3	-
Pinacol	$C_6H_{14}O_2$	174.35	35	160.3	-

Mesitylene (C_9H_{12}) + Ethyl tartrate ($C_8H_{14}O_6$)
Patterson, 1902

t	d	t	d
0%		2.0656%	
19.9	0.85969	19.44	0.86476
23.6	0.85669	24.56	0.86055
27.34	0.85362	28.25	0.85755
29.45	0.85189		
40.3	0.84299		
60.05	0.82665		
5.00273%		10.0073%	
18.22	0.87264	17.97	0.88510
24.55	0.86740	21.95	0.88175
28.61	0.86407	33.03	0.87247
38.25	0.85605	47.77	0.8599
62.30	0.8358	64.32	0.8456
24.977%		36.233%	
19.57	0.92346	17.05	0.95861
23.6	0.91991	23.05	0.95315
32.61	0.91191	39.3	0.93837
46.96	0.89920		
62.9	0.88465		
49.9975%		50.0217%	
17.6	1.00169	19.06	1.00046
24.82	0.99495	21.94	0.99777
34.33	0.98602	31.65	0.98864
74.7687%		62.85	0.9592
17.44	1.09291		
26.62	1.08394		
t	(α) D	t	(α) D
2.0656%		5.00273%	
16.4	-2.10	16	+0.19
18.8	1.79	16.8	0.34
26.3	0.21	25	1.65
30.4	+0.59	31	2.64
32.3	1.09	39.3	3.87
10.0073%		44.9	4.58
16.4	+1.31	50	5.14
26.4	2.95	61.9	6.56
29.5	3.40	70	7.42
47	5.74	73.4	7.80
50.9	6.23	24.977%	
60.5	7.30		
65.7	7.85	18	+2.87
70	8.33	19	2.97
71.2	8.47	39.7	5.90
78.8	9.23	41.1	6.07
100	11.06	64.7	8.95
36.2339%		69.6	9.45
16	+3.18	70	9.50
22.7	4.30	73.3	9.83
32	5.71	49.9975%	
34.7	6.06		
50.0217%		12.5	+3.44
15.9	+4.09	12.9	3.54
24.2	5.13	17	4.19
25.4	5.27	19.8	4.64
29.3	5.84	21.5	4.89
46.9	7.98	27.2	5.71
50	8.38	74.7687	
56.2	8.98		
62.8	9.62	13.3	+4.91
70	10.27	14.5	5.06
71.9	10.42	21.8	6.13
77.5	10.92	29.9	7.14

Rule, Barnett and Cunningham, 1933

mol%	(α) mol
	54.61
20°	
5.0	0.02
13.30	0.37
23.24	1.03
38.72	2.26
51.4	3.45
68.9	5.17

Mesitylene (C_9H_{12}) (b.t. = 164.6) + Alcohols
Lecat, 1949

ZnCl Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Cyclohexanol	$C_6H_{12}O$	160.8	42	156.4	-3.3 (50%)
Methyl cyclohexanol	$C_7H_{14}O$	168.5	34	160.5	-3.0 (30%)
Methoxyglycol	$C_3H_8O_2$	124.5	-	124.3	-1.5 (90%)
Propoxyglycol	$C_5H_{12}O_2$	151.35	72	149.4	-1.5 (80%)
Butoxyglycol	$C_6H_{14}O_2$	171.15	32	162.0	-
Methoxydiglycol	$C_5H_{12}O_3$	192.95	13	162.5	-1.2 (10%)
Methyl lactate	$C_4H_8O_3$	143.8	80	141.0	-4.0 (80%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	72	150.2	-2.2 (90%)
Propyl lactate	$C_6H_{12}O_3$	171.7	30	161.0	-2.0 (20%)
Isopropyl lactate	$C_6H_{12}O_3$	168.8	60	159.5	-
Ethylene chlorhydrine	C_2H_5OCl	128.6	-	128.0	-1.8 (90%)
Dichloroethanol	$C_2H_4OCl_2$	146.2	-	145.0	-
1,3-Dichloro-1,2-propanol	$C_3H_6OCl_2$	175.8	32	161.5	-3.7 (50%)
Iodethanol	C_2H_5OI	176.5	35	158.5	-
Ethanolamine	C_2H_7ON	170.8	30	148.5	-

Methyldiisopropyl benzene ($C_{13}H_{20}$) + Alcohols
Francis, 1944

2nd Comp.	C.S.T.
Methyl alcohol (CH_4O)	32
Diethylene glycol ($C_4H_{10}O_3$)	229
Triethylene glycol ($C_6H_{14}O_4$)	203
Furyl alcohol ($C_5H_6O_2$)	32
Phenylethanolamine ($C_8H_{11}ON$)	69
Ethylene chlorhydrin (C_2H_5OCl)	13

Triethylbenzene s. ($C_{12}H_{18}$) (b.t.=215.5) + Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	48	182.5	-
Glycerol	$C_3H_8O_3$	290.5	8	212.8	-
Diethylene glycol	$C_4H_{10}O_3$	245.5	24	209.0	-0.5
					(10%)
Methoxy-diglycol	$C_7H_{12}O_3$	192.95	65	190.0	-
Methoxy-triglycol	$C_7H_{16}O_4$	245.25	18	212.0	-
2-Terpineol	$C_{10}H_{18}O$	210.5	-	210.0	-
Borneol	$C_{10}H_{18}O$	215.0	-	212.7	-
Menthol	$C_{10}H_{20}O$	216.3	45	213.5	-
Citronellol	$C_{10}H_{20}O$	224.4	-	215.3	-
Benzyl alcohol	C_7H_8O	205.25	61	202.1	-1.7
					(55%)
Phenyl ethanol	$C_8H_{10}O$	219.4	-	212.5	-1.3
					(30%)

Triethylbenzene ($C_{12}H_{18}$) + Alcohols

Francis, 1944

2nd Comp.	C.S.T.
Ethylene chlorhydrin (C_2H_5OCl)	-15
Methyl alcohol (CH_4O)	19
Phenylethanolamine ($C_8H_{11}ON$)	34
Tetrahydrofurfuryl alcohol ($C_5H_{10}O_2$)	-78
Furfuryl alcohol ($C_5H_6O_2$)	109
Triethylene glycol ($C_6H_{14}O_4$)	188
Diethylene glycol ($C_4H_{10}O_3$)	219

Hexamethylbenzene ($C_{12}H_{18}$) + Diethylene glycol
($C_4H_{10}O_3$)

Francis, 1944

C.S.T. = 258

Hexamethylbenzene ($C_{12}H_{18}$) + Triethylene glycol
($C_6H_{14}O_4$)

Francis, 1944

C.S.T. = 235

Diphenyl ($C_{12}H_{10}$) + Alcohols

Francis, 1944

2nd Comp.	C.S.T.
Glycol ($C_2H_6O_2$)	217
Diethylene glycol ($C_4H_{10}O_3$)	129
Triethylene glycol ($C_6H_{14}O_4$)	65
Ethanolamine (C_2H_7ON)	133
Diethanolamine ($C_4H_{11}O_2N$)	183
Triethanolamine ($C_6H_{15}O_3N$)	185

Diphenyl (C ₁₂ H ₁₀) (b.t.=256.1) + Alcohols				
Lecat, 1949				

Stilbene ($C_{14}H_{12}$) + Triethylene glycol
($C_6H_{14}O_4$)

Lecat, 1949

%	b. t.	
0	305.6	Az
60	284.5	
100	188.7	

Stilbene ($C_{14}H_{12}$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.	
0	306.5	Az
88	196.8	
100	197.4	

Triphenylmethane ($C_{19}H_{16}$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann, Mauermann and al., 1923

%	f. t.	E
0.00	91	-
4.00	88.5	78.5
8.29	85	"
12.40	82	"
14.20	80.5	"
16.48	79	"
20.92	86	78.5
28.78	98.5	"
37.82	110.5	"
48.09	122	"
62.30	135	-
71.33	142	-
80.61	148	-
92.85	155	-
100	159	-

%	f. t.	E	min.
16.0	79	79	40
28.8	98.5	78.5	25
40.0	114.0	78.5	10
59.6	132.0	115	-
80.0	148.0	140	-

Naphthalene ($C_{10}H_8$) + Methyl alcohol (CH_3O)

Vandenberghe, 1899

%	d (at b. t.)	D b. t.
96.77	0.755	+0.195
94.46	0.761	0.325
91.40	0.773	0.505
87.88	0.786	0.695
80.33	0.796	0.945

Vandenberghe, 1903

%	D b. t.	%	D b. t.
97.05	+0.175	82.65	+0.975
94.34	0.360	81.97	0.99
89.29	0.653	81.30	1.095
87.72	0.720	67.11	1.75
83.33	0.97		

%	D b. t.	%	D b. t.
97.09	0.165	79.37	1.185
93.46	0.42	88.50	0.645
92.59	0.45	84.03	0.94
90.09	0.62	78.11	1.26

Timofeev, 1894

%	f. t.
95.2	10.4
88.6	35.2
76.7	52.0
50.6	65.0
27.0	72.0
0	80

Speyers, 1902

mol%	f. t.
99.13	0.0
98.32	14.6
97.03	31.8
90.17	48.0
87.66	59.9

Ward, 1926

mol%	f. t.	mol%	f. t.
18.0	74.3	89.76	56.7
20.6	73.9	95.84	43.9
26.8	72.8	96.10	37.4
33.4	71.7	96.67	33.6
50.3	69.5	97.45	26.3
61.3	68.4	98.37	13.5
74.5	65.7	98.93	0.8
85.75	60.8		

Sunier, 1930

%	f. t.	%	f. t.
28.06	68.6	80.04	47.8
35.17	40.1	80.19	47.6
67.79	57.9	81.02	48.9
68.68	57.4	86.05	40.2
68.76	58.4	85.55	37.6
79.50	50.6		

Speyers, 1902

t	d	sat. sol.
0.0	0.8194	
16.6	0.8088	
29.0	0.8048	
47.0	0.8086	
61.7	0.8436	
68.0	0.9022	

Naphthalene ($C_{10}H_8$) + Ethyl alcohol (C_2H_6O)

Raoult, 1890

mol%	$\frac{p_2 - p}{p_2} \cdot 100$
78°	
95.492	3.710
88.968	7.288
85.286	9.329

Vandenberghe, 1899

%	D b. t.	d (at b. t.)
93.93	+0.525	0.746
87.92	1	0.759
81.91	1.445	0.773
79.36	1.7	0.779

Vandenberghe, 1903

%	D b. t.	%	D b. t.
93.46	+0.555	96.15	0.34
87.72	0.970	94.34	0.525
82.65	1.390	92.59	0.675
78.12	1.72	87.72	1.00
92.94	0.757	81.97	1.445
87.72	0.765	79.37	1.700

Timofeev, 1894

%	f. t.
94.0	10.4
75.8	48.5
53.8	61.0

Speyers, 1902	
mol%	f. t.
98.20	0.0
97.87	8.6
95.18	31.8
90.30	46.9
35.77	69.8

Sunier, 1930	
%	f. t.
26.72	67.7
45.70	63.0
61.84	57.1
76.40	47.0
75.68	49.7
79.91	43.1
85.03	35.2
88.74	25.8
92.27	15.7

Speyers, 1902	
t	d
Saturated solution	
0.0	0.8175
17.0	0.8104
31.2	0.8084
51.0	0.8230
72.4	0.9563

Piatti, 1932	
%	η (in Engler degrees)
20°	
100	1.050
90	"
80	"

Naphthalene ($C_{10}H_8$) + Propyl alcohol (C_3H_8O)			
Vandenberghe, 1899			
%	D b. t.	d (at b. t.)	
96.64	+0.385	0.741	
92.73	0.805	0.749	
88.18	1.27	0.756	
85.34	1.575	0.762	
81.71	1.955	0.77	

Timofeev, 1894			
%	f. t.		
94.5	10.4		
85.8	35.2		
49.6	61.5		

Sunier, 1930			
%	f. t.	%	f. t.
21.2	69.5	80.56	41.7
29.80	66.9	83.78	37.2
54.78	59.3	84.51	36.0
66.29	53.8	83.57	27.9
72.51	49.8	90.38	22.9

Speyers, 1902			
mol%	f. t.	t	d
sat. sol.			
97.91	0.0	0.0	0.8285
97.30	10.4	14.6	0.8228
94.66	30.3	30.7	0.8206
84.66	50.3	41.8	0.8247
37.91	68.5	59.7	0.8634
		72.4	0.9535

Naphthalene ($C_{10}H_8$) + Isopropyl alcohol (C_3H_8O)			
Sunier, 1930			
%	f. t.	%	f. t.
18.73	69.9	82.85	42.8
33.93	65.8	86.39	37.8
53.74	60.2	87.87	35.3
66.98	54.9	90.064	30.9
72.70	51.7	92.403	24.4
80.24	45.2		

Naphthalene ($C_{10}H_8$) + Butyl alcohol ($C_4H_{10}O$)

Ward, 1926

mol%	f. t.	mol%	f. t.
9.5	76.0	78.9	52.3
16.3	73.9	84.25	46.5
23.8	71.7	90.47	35.6
30.0	70.1	91.83	31.6
39.1	68.1	93.79	24.3
56.8	63.2	94.24	22.0
72.4	56.9	96.0	11.7

Sunier, 1930

%	f. t.
25.73	68.4
58.17	57.8
74.51	47.6
84.81	34.7

Naphthalene ($C_{10}H_8$) + Isobutyl alcohol
($C_4H_{10}O$)

Sunier, 1930

%	f. t.	%	f. t.
19.17	70.2	84.43	40.9
45.90	63.1	86.53	37.6
54.91	60.3	77.24	36.3
75.12	50.4	93.63	19.5

Naphthalene ($C_{10}H_8$) + sec. Butyl alcohol
($C_4H_{10}O$)

Sunier, 1930

%	f. t.	%	f. t.
26.94	68.8	76.31	45.4
45.95	60.6	81.37	40.5
54.65	57.3	85.65	34.9
74.97	46.4	89.18	28.7

Naphthalene ($C_{10}H_8$) + tert. Butyl alcohol
($C_4H_{10}O$)

Kremann, Mauermann and al., 1923

%	f. t.	%	f. t.
100.0	24.2	44.60	61.3
96.9	21.0	40.5	62.6
93.1	22.0	37.3	63.2
89.3	29.1	31.8	64.6
84.9	35.8	28.8	65.5
79.7	41.9	24.2	66.9
74.6	47.2	19.5	68.8
68.4	51.9	16.3	70.2
62.0	55.0	6.7	74.5
57.2	56.9	0.0	80.3
54.8	57.6		
51.4	59.2		
47.2	60.3		
44.1	61.3		
41.2	62.4		

E : between 97 and 50% 18.9° - 19.1°

Sunier, 1930

%	f. t.	%	f. t.
28.36	66.6	82.34	41.7
42.69	62.4	85.51	37.8
56.39	57.8	89.23	31.6
72.24	50.2	93.51	22.1
76.39	47.3		

Lecat, 1949

Naphthalene ($C_{10}H_8$) (b.t.=218.0) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	290.5	51	283.9	-
Glycerol	($C_3H_8O_3$)	290.5	10	215.2	-
Diethylene glycol	($C_4H_{10}O_3$)	245.5	22	212.6	78.0

Francis, 1944

Naphthalene ($C_{10}H_8$) + Alcohols.

2 nd comp.	C.S.T.
Glycol ($C_2H_6O_2$)	195
Propylene glycol ($C_3H_8O_2$)	100
Diethylene glycol ($C_4H_{10}O_3$)	34
Glycerol ($C_3H_8O_3$)	250
Monoacetin ($C_5H_{10}O_4$)	78

Lecat, 1949

Naphthalene ($C_{10}H_8$) (b.t. = 218.0) +
Alcohols

2 nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Methoxy diglycol	$C_5H_{12}O_3$	192.95	89	192.2	-
Ethoxy diglycol	$C_6H_{14}O_3$	201.9	-	200.5	-
Methoxy triglycol	$C_7H_{16}O_4$	245.25	20	214.8	-
Borneol	$C_{10}H_{18}O$	215.0	65	214.4	-
Terpineol-1	$C_{10}H_{18}O$	218.85	55	215.7	-
Citronellol	$C_{10}H_{20}O$	224.4	25	217.8	-
Menthol	$C_{10}H_{20}O$	216.3	74.5	215.05	42

Naphthalene ($C_{10}H_8$) + Furfuryl alcohol ($C_5H_6O_2$)

Sunier, 1931

mol%	f.t.	mol%	f.t.
26.2	71.4	75.1	53.0
21.5	72.6	66.8	58.7
38.1	68.3	81.4	46.3
43.9	67.2	89.06	32.4
54.5	64.3		

Naphthalene ($C_{10}H_8$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson, 1902

t	(α) _D	t	d
10.017%			
100	+26.47	84.1	0.9897
87.8	26.30	99	0.9780
79.4	26.24		
70	26.14		
25.017%			
100	21.7	82.5	1.0117
77.2	20.7	99	0.9980
71.4	20.4		
70	20.34		
49.77%			
100	18.48	73.9	1.0583
84	17.57	82	1.0509
78.2	17.07	90	1.0445
70	16.46	98.5	1.0349
69	16.53		
74.98%			
99	15.58	57.3	1.1183
84.9	14.96	70.65	1.1056
75.6	14.47	80.65	1.0956
70	13.47	97.7	1.0789
60	13.01		
54.9	12.23		
44.4	14.12		

Naphthalene ($C_{10}H_8$) + Menthol ($C_{10}H_{20}O$)

Scheuer, 1910

wt%	mol%	f.t.	wt%	mol%	f.t.
0	0	80.1	61.46	56.67	54.7
1.47	1.21	79.5	66.02	61.43	51.9
3.52	2.98	78.6	69.08	64.69	49.6
7.07	5.87	77.15	72.65	68.54	46.5
11.08	9.27	75.5	75.89	72.08	42.75
15.42	13.01	73.75	83.22	80.26	35.1
21.54	18.38	71.3	83.24	80.28	35.1
27.92	24.11	68.8	85.30	82.63	32.5
32.42	28.24	67.05	87.19	84.82	32.5
37.90	33.35	64.9	88.45	86.26	33.25
41.89	37.15	63.3	91.18	89.45	35.05
42.86	38.08	63	91.21	89.48	35.05
45.41	40.56	61.9	92.82	91.38	36.25
45.80	40.94	61.7	95.45	94.51	38.25
48.28	43.37	60.65	96.18	95.38	38.8
50.07	45.12	59.9	97.42	96.88	39.85
52.83	47.87	58.9	98.98	98.76	41.15
52.99	48.04	58.55	100	100	42.0
57.41	52.50	56.6			

E : 31.7°

Bugnet, 1909					
Eutectic					
Scheuer, 1910					
wt %	mol %	d		η	
		82.2°	99.0°	82.2°	99.0°
0	0	0.9764	0.9635	727	558
19.40	16.49	.9683	.9399	854	640
35.87	31.45	.9260	.9127	789	588
54.17	49.52	.8959	.8877	975	718
69.89	65.63	.8830	.8687	1142	763
84.76	82.02	.8666	.8519	1321	808
92.63	91.16	.8584	.8452	1571	914
100	100	.8496	.8372	1850	1041
%		(α) D			
		dark red		yellow	
19.40	-35.039	-42.919		-45.650	
35.87	-37.708	-46.078		-47.824	
54.17	-37.849	-47.593		-49.997	
69.89	-38.405	-48.157		-50.207	
84.76	-39.222	-49.139		-50.871	
92.63	-39.981	-49.911		-52.020	
100	-40.149	-50.15		-52.385	
%					
		green	indigo blue	violet	
19.40	-51.827	-85.555		-	
35.87	-54.379	-90.276		-	
54.17	-56.078	-92.968		-	
69.89	-56.938	-94.084		-	
84.76	-58.028	-95.768		-96.239	
92.63	-59.041	-97.609		-98.173	
100	-59.419	-		-98.584	
Naphthalene (C ₁₀ H ₈) + Benzoin (C ₁₄ H ₁₂ O ₂)					
Bernouilli and Sarasin, 1930					
%		f.t.		E	
0		79.8		-	
10.1		76.8		74.0	
19.00		74.1		73.9	
30.0		86.5		74.5	
50.2		103.5		74.3	
64.9		113		74.5	
79.5		124		73.9	
100		132		-	
Naphthalene (C ₁₀ H ₈) + Triphenylcarbinol (C ₁₉ H ₁₆ O)					
Kremann, Mauermann and al., 1923					
%		f.t.		f.t.	
100.0		159.2		64.5	120.5
94.7		154.0		61.5	116.0
82.1		140.0		57.4	111.0
75.6		132.0		53.8	104.1
72.5		129.0		51.8	103.2
69.8		126.0		49.7	100.2
67.2		123.0		48.6	99.0
%		f.t.		E	
0.0		80.3		-	
4.4		78.5		-	
8.2		75.2		-	
12.2		75.2		-	
18.3		72.9		-	
22.3		71.8		-	
26.3		70.4		69.2	
30.8		70.8		-	
35.4		79.1		-	
37.4		82.0		-	
39.9		85.0		-	
42.7		89.6		-	
46.2		94.0		-	
49.3		98.5		-	
53.0		104.0		-	
Naphthalene (C ₁₀ H ₈) + Chloral hydrate (C ₂ H ₃ O ₂ Cl ₃)					
Bugnet, 1989					
Eutectic					
Francis, 1944					
Naphthalene (C ₁₀ H ₈) + varia					
2nd Comp.		C.S.T.			
Glycerol chlorhydrin (C ₃ H ₇ O ₂ Cl)		132			
Ethanolamine (C ₂ H ₇ ON)		97			
Diethanolamine (C ₄ H ₁₁ O ₂ N)		161			
Triethanolamine (C ₆ H ₁₅ O ₃ N)		151			

1-Methylnaphthalene ($C_{11}H_{10}$) + Methyl alcohol
(CH_3O)

Francis, 1944

C.S.T. lower than 78°

1-Methylnaphthalene ($C_{11}H_{10}$) + Undecanol
($C_{11}H_{24}O$)

Feidman and Orchin, 1952

mol% L	mol% V	b. t.	mol% V	b. t.
-----------	-----------	-------	-----------	-------

300 mm			250 mm	
61.3	66.3	192.6	67.0	186.6
65.9	71.0	193.2	70.2	186.6
71.9	76.1	192.3	75.8	185.8
76.5	79.0	192.7	79.3	186.4
81.2	83.8	191.9	83.6	185.4
86.0	87.4	191.6	87.5	185.4
90.7	91.5	191.6	91.4	185.6
95.7	96.3	190.8	96.2	184.7

150 mm			100 mm	
61.3	64.6	171.6	65.3	158.7
65.9	69.8	170.4	68.5	157.6
71.9	74.6	167.3	73.9	155.6
76.5	78.2	170.0	77.6	159.0
81.2	82.8	170.3	81.9	157.6
86.0	86.6	170.3	86.0	158.6
90.2	90.8	171.2	90.3	158.5
98.7	95.9	180.2	95.4	157.5

50 mm			20 mm	
61.3	63.4	138.8	60.4	120.5
65.9	67.1	140.4	64.2	120.0
71.9	71.8	139.0	68.8	117.2
76.5	76.2	139.7	73.1	117.7
81.2	80.5	140.0	78.1	116.7
86.0	85.0	139.4	83.8	119.8
90.2	89.5	140.0	87.7	119.1
98.7	95.0	139.8	94.4	118.5

1-Methylnaphthalene ($C_{11}H_{10}$) + Alcohols

Lecat, 1949

Name	2nd Comp. Formula	Az		
		b. t.	%	b. t.
Glycol	$C_2H_6O_2$	197.4	60	190.25
Glycerol	$C_3H_8O_3$	290.5	18	236.95
Diethylene glycol	$C_4H_{10}O_3$	245.5	45	227.5
Methoxytriethylene glycol	$C_7H_{16}O_4$	245.25	46	232.0
Phenyl propanol	$C_9H_{12}O$	235.6	60	234.2
Cinnamic alcohol	$C_9H_{10}O$	257.0	12	244.6
Phenoxyglycol	$C_8H_{10}O_2$	245.2	43	243.0

1-Methylnaphthalene ($C_{11}H_{10}$) + Alcohols

Francis, 1944

2nd Comp.	C.S.T.
Glycol	217
Diethylene glycol	126
Triethylene glycol	62
Monoacetin	124
Glycerol-chlorhydrin	153
Ethanolamine	182
Triethanolamine	177

2-Methylnaphthalene ($C_{11}H_{10}$) + Undecanol
($C_{11}H_{24}O$)

Feldman and Orchin, 1952

mol%	mol%	b. t.	mol%	b. t.
L	V		V	
400 mm		300 mm		
3.4	8.4	210.6	8.2	199.3
8.8	15.8	210.5	15.5	199.7
13.9	-	-	21.1	199.6
21.8	26.7	208.7	24.0	199.0
28.0	36.5	205.6	34.1	195.3
36.0	39.6	206.7	43.5	194.2
44.6	49.6	202.9	52.6	193.9
50.2	57.3	202.7	57.3	193.0
57.1	63.6	201.0	62.9	192.0
65.8	69.5	202.5	68.9	191.9
75.8	78.0	201.3	77.4	190.9
78.2	80.7	201.0	80.5	190.9
83.5	85.2	201.6	84.6	190.7
86.3	87.9	201.8	87.7	190.6
93.4	92.4	169.0	92.2	190.5
94.2	95.0	169.1	94.9	190.7
97.6	98.1	170.1	97.8	190.6
250 mm		200 mm		
3.4	8.5	193.8	8.6	184.7
8.8	15.8	193.6	15.9	185.1
13.9	20.1	191.7	21.1	184.4
21.8	24.0	192.0	29.5	182.1
28.0	33.8	190.4	31.2	183.7
36.0	43.2	187.8	43.2	180.6
44.6	49.7	185.3	52.2	179.5
50.2	56.5	186.6	55.9	178.3
57.1	62.2	185.4	62.8	176.7
65.8	68.9	185.8	68.7	178.8
75.8	77.3	184.9	76.3	176.2
78.2	80.2	184.8	80.0	178.7
83.5	84.7	185.3	84.6	178.1
86.3	87.5	184.9	87.0	177.4
93.4	92.0	185.2	91.5	177.6
94.2	94.5	184.0	94.9	176.1
97.6	97.3	184.6	97.7	177.7
150 mm		100 mm		
3.4	8.3	176.3	7.7	163.9
8.8	15.0	175.2	14.4	163.3
13.9	21.6	173.9	20.7	162.1
21.8	28.6	172.2	26.7	159.1
28.0	32.4	174.0	32.7	160.6
36.0	41.1	171.9	42.2	159.7
44.6	51.3	171.4	50.9	159.4
50.2	56.6	170.4	55.1	157.4
57.1	68.0	170.0	67.0	157.8
65.8	76.3	169.2	75.8	157.5
75.8	79.1	169.4	78.1	156.8
78.2	83.7	169.0	83.1	157.8
83.5	86.4	167.8	85.7	155.5
86.3	91.4	169.0	90.9	156.8
93.4	94.2	169.1	94.0	156.5
94.2	97.99	170.1	97.5	157.3

50mm

20 mm

3.4	7.6	144.0	7.1	121.8
8.8	15.2	143.4	13.7	121.0
13.9	19.7	142.1	19.5	121.0
21.8	28.0	142.0	25.5	120.8
28.0	31.0	141.2	31.1	121.1
36.0	39.7	141.3	37.6	119.4
44.6	48.0	140.0	45.0	119.4
50.2	52.8	139.7	49.6	119.0
57.1	58.3	138.9	54.5	118.6
65.8	65.1	139.4	61.3	119.3
75.8	73.8	139.1	70.9	119.5
78.2	75.8	138.6	73.3	120.6
83.5	81.1	139.6	79.1	120.7
86.3	84.5	139.6	82.7	121.3
93.4	90.0	140.6	88.0	121.0
94.2	93.3	140.2	92.1	121.4
97.6	97.7	140.2	97.0	121.3

2-Methylnaphthalene ($C_{11}H_{10}$) (b. t. = 241.15) +
Lecat, 1949 Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	197.4	57	189.2	-
Glycerol	($C_3H_8O_3$)	290.5	16.5	233.7	-
Diethylene glycol	($C_4H_{10}O_3$)	245.5	39	225.45	123.5
Methoxytriethylene glycol	($C_7H_{16}O_4$)	245.25	44	229.4	-
Phenylpropanol	($C_9H_{12}O$)	235.6	-	233.7	-

2-Methylnaphthalene ($C_{11}H_{10}$) + Alcohols.
Francis, 1944

2 nd comp.	C. S. T.
Glycerol ($C_3H_8O_3$)	216
Diethylene glycol ($C_4H_{10}O_3$)	127
Triethylene glycol ($C_6H_{14}O_4$)	61
Glycerolchlorhydrin ($C_3H_7O_2Cl$)	155
Ethanolamine (C_2H_7ON)	134
Diethanolamine ($C_4H_{11}O_2N$)	182
Triethanolamine ($C_6H_{15}O_3N$)	178

2-Isopropyl naphthalene ($C_{13}H_{14}$) + Alcohols

Francis, 1944

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	11
Diethylene glycol ($C_4H_{10}O_3$)	175
Triethylene glycol ($C_6H_{14}O_4$)	133
Ethanolamine (C_2H_7ON)	168
Diethanolamine ($C_4H_{11}O_2N$)	217
Triethanolamine ($C_6H_{15}O_3N$)	226

sec.Amylnaphthalene ($C_{15}H_{18}$) + Alcohols

Francis, 1944

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	49
Furfuryl alcohol ($C_5H_6O_2$)	0
Diethylene glycol ($C_4H_{10}O_3$)	199
Triethylene glycol ($C_6H_{14}O_4$)	16
Ethylene chlorhydrin (C_2H_5OCl)	-78
Diethanolamine ($C_4H_{11}O_2N$)	239
Triethanolamine ($C_6H_{15}O_3N$)	251

Diisopropyl naphthalene ($C_{16}H_{20}$) + Alcohols

Francis, 1944

2nd Comp. C.S.T.

Methyl alcohol (CH_4O)	58
Furfuryl alcohol ($C_5H_6O_2$)	18
Diethylene glycol ($C_4H_{10}O_3$)	217
Triethylene glycol ($C_6H_{14}O_4$)	177
Ethylene chlorhydrin (C_2H_5OCl)	-28
Diethanolamine ($C_4H_{11}O_2N$)	258
Triethanolamine ($C_6H_{15}O_3N$)	265
Phenylethanolamine ($C_8H_{11}ON$)	21

di-tert. Butyl naphthalene ($C_{18}H_{24}$) + Diethylene glycol ($C_4H_{10}O_3$)

Francis, 1944

C.S.T. = 231

di-tert. Butyl naphthalene ($C_{18}H_{24}$) + Triethylene glycol ($C_6H_{14}O_4$)

Francis, 1944

C.S.T. = 190

Diamylnaphthalene ($C_{20}H_{28}$) + Alcohols

Francis, 1944

2nd Comp. C.S.T.

Ethylene glycol ($C_2H_6O_2$)	262
Triethylene glycol ($C_6H_{14}O_4$)	246
Tetrahydrofurfuryl alcohol ($C_5H_{10}O_2$)	9
Furfuryl alcohol ($C_5H_6O_2$)	88
Ethylene chlorhydrin (C_2H_5OCl)	68
Phenyl ethanolamine ($C_8H_{11}ON$)	98

Anthracene (C ₁₄ H ₁₀) + Alcohols.				Fluorene (C ₁₃ H ₁₀) + Glycol (C ₂ H ₆ O ₂)			
Francis, 1944				Lecat, 1949			
2 nd comp.		C.S.T.		%		b. t.	
Ethylene glycol (C ₂ H ₆ O ₂)		217		0		296.4	
Diethanolamine (C ₄ H ₁₁ O ₂ N)		195		82		196.0 Az	
Triethanolamine (C ₆ H ₁₅ O ₃ N)		197		100		197.4	
Phenanthrene (C ₁₄ H ₁₀) + Ethyl alcohol (C ₂ H ₆ O)				Fluorene (C ₁₃ H ₁₀) + Diglycol (C ₄ H ₁₀ O ₃)			
Innes, 1918				Lecat, 1949			
%		p		%		b. t.	
75°				0		296.4	
100		669.4		80		243.0 Az	
94.91		660.4		100		245.5	
93.30		658.4					
92.97		657.5					
87.88		650.7					
86.13		647.9					
		75.0					
		629.1					
Sreyers, 1902				Fluorene (C ₁₃ H ₁₀) + Alcohols.			
f. t.		%		t		d	
sat. sol.				Francis, 1944			
0.0		99.18		0.0		0.8141	
10.9		99.18		15.6		0.8035	
32.1		98.44		35.3		0.7960	
47.0		97.81		52.2		0.7941	
70.2		92.48		76.4		0.8654	
Phenanthrene (C ₁₄ H ₁₀) + Alcohols				2 nd comp.			
Francis, 1944				C.S.T.			
2 nd Comp.		C.S.T.		Glycol (C ₂ H ₆ O ₂)		220	
Ethylene glycol (C ₂ H ₆ O ₂)		225		Diglycol (C ₄ H ₁₀ O ₃)		138	
Diethylene glycol (C ₄ H ₁₀ O ₃)		128		Ethanolamine (C ₂ H ₇ ON)		145	
Glycerol chlorhydrin (C ₃ H ₇ O ₂ Cl)		174		Diethanolamine (C ₄ H ₁₁ O ₂ N)		179	
Monoacetin (C ₅ H ₁₀ O ₄)		130		Triethanolamine (C ₆ H ₁₅ O ₃ N)		180	
Ethanolamine (C ₂ H ₇ ON)		139					
Diethanolamine (C ₄ H ₁₁ O ₂ N)		182					
Triethanolamine (C ₆ H ₁₅ O ₃ N)		174					

Acenaphthene ($C_{12}H_{10}$) + Ethyl alcohol (C_2H_6O)

Speyers, 1902

mol%		f. t.	
99.43	0.0		
99.16	10.0		
98.30	30.3		
96.14	49.8		
87.06	71.6		
t	d	t	d
sat. sol.		100%	
0.0	0.8108	0.0	0.8074
15.0	0.8013	19.1	0.7921
36.3	0.7910	35.3	0.7780
53.4	0.7890	52.3	0.7633
73.0	0.8186	72.8	0.7448

Acenaphthene ($C_{12}H_{10}$) + Propyl alcohol (C_3H_8O)

Speyers, 1902

mol%		f. t.	
99.12	0.0		
99.03	10.5		
98.12	31.1		
95.63	50.3		
80.1	73.4		
t	d	t	d
sat. sol.		100%	
0.0	0.8228	0.0	0.8192
12.9	0.8171	18.0	0.8067
26.6	0.8110	28.0	0.7991
47.4	0.8063	44.4	0.7854
64.7	0.8063	65.1	0.7678
83.3	0.9736	80.6	0.7538

Acenaphthene ($C_{12}H_{10}$) (b. t. = 277.9) +

Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	$C_2H_6O_2$	197.4	74.2	194.65	-
Glycerol	$C_3H_8O_3$	290.5	29	259.1	-
Diglycol	$C_4H_{10}O_3$	245.5	62	239.6	136
Triglycol	$C_6H_{14}O_4$	288.7	35	271.5	-
Methoxy- triglycol	$C_7H_{16}O_4$	245.25	71	242.5	-

Indene (C_9H_8) (b. t. = 182.6) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Octyl alcohol	$C_8H_{18}O$	195.2	12	182.4	-
Isooctyl alcohol	$C_8H_{18}O$	180.4	-	178.5	-
Glycol	$C_2H_6O_2$	197.4	26	168.4	-
Glycerol	$C_3H_8O_3$	290.5	2	182.4	-
Methoxy- diglycol	$C_5H_{12}O_3$	192.95	30	177.5	-
Isobutyl lactate	$C_7H_{14}O_3$	182.15	49	178.5	-
Glycol monoacetate	$C_4H_8O_3$	190.9	20	180.0	-
1,3-Dichloro- 2-Propanol	$C_3H_6OCl_2$	175.8	66.5	173.5	-0.9 (66.5%)
1,2-Dichloro- 1-propanol	$C_3H_6OCl_2$	182.5	55	178.5	-2.5 (50%)

Tetraethylsilane ($C_8H_{20}Si$) + Ethyl alcohol (C_2H_6O)

Bjerrum and Jozefowicz, 1932

mol %		p		
L	V	p ₁	p ₂	p
20°				
100.00	100.00	0.0	43.45	43.45
94.64	95.48	1.97	41.65	43.62
89.94	93.87	2.67	40.93	43.60
75.32	92.36	3.25	39.31	42.56
49.78	91.89	3.38	38.34	41.72
28.20	91.69	3.34	36.85	40.19
7.80	90.02	3.42	30.86	34.28
3.04	83.36	3.96	19.83	23.79
0.0	0.0	3.66	0.0	3.66
35°				
100.0	100.0	0.0	101.15	101.15
95.26	95.76	4.39	99.16	103.55
89.52	93.95	6.12	97.42	103.54
70.66	92.72	7.39	94.12	101.51
43.26	92.02	7.82	90.20	98.02
24.90	91.56	8.02	87.00	95.02
10.98	89.89	8.40	74.73	83.13
3.38	85.32	8.56	49.76	58.32
0.00	0.00	8.70	0.0	8.70
50°				
100.0	100.0	0.0	220.25	220.25
94.99	95.83	9.30	213.6	222.9
90.06	94.28	12.66	208.7	221.4
75.75	92.72	15.74	200.4	216.1
50.52	91.96	16.65	190.55	207.2
28.56	91.31	17.69	185.8	203.5
16.67	88.77	18.50	146.2	164.7
3.95	85.63	18.95	113.3	132.2
0.0	0.0	19.43	0.0	19.43

XXIII. HYDROCARBONS + PHENOLS

Ethane (C_2H_6) + o-Nitrophenol ($C_6H_5O_3N$)

Scheffer and Smittenberg, 1933

f. t.	P	f. t.	P
C + L ₁ + V		C + L ₂ + Fl	
14.0	33.1	38.8	159
18.0	36.0	38.1	97.0
22.0	39.2	37.7	73.0
26.0	42.5	37.7	60.0
30.0	46.0	37.8	52.0
33.0	48.9	38.2	45.7
34.3	50.3	39.2	36.3
		40.9	24.6
		44.8	0.0
L ₁ + L ₂ + V			
34.5	50.4		

Hixson and Hixson 1941

Propane (C_3H_8) + Phenol (C_6H_6O)Propane (C_3H_8) + p-Cresol (C_7H_8O)Propane (C_3H_8) + Carvacrol ($C_{10}H_{14}O$)

Insoluble.

Pentane (C_5H_{12}) + Phenol (C_6H_6O)

Vondracek 1937

%	f. t.	sat. t.	%	f. t.	sat. t.
100	40.8	-	38.68	31.9	55.8
95.20	37.3	-	33.44	-	54.7
90.49	35.1	-	27.02	31.9	51.6
83.86	32.5	-	19.67	31.7	45.5
82.60	32.0	23.3	13.23	31.7	36.6
81.44	31.95	27.8	11.03	30.8	29.9
80.05	31.9	31.4	10.06	29.7	27.1
79.45	-	33.5	7.55	27.2	19.0
74.79	31.9	42.5	4.10	20.5	-
69.32	-	48.8	3.00	16.2	-
59.54	31.9	55.3	2.20	10.8	-
49.78	-	56.6	1.57	0.8	-
44.75	-	56.5			

Isopentane (C_5H_{12}) + Phenol (C_6H_6O)

Vondracek, 1937

%	f. t.	sat. t.	%	f. t.	sat. t.
100	40.8	-	31.88	-	63.1
96.47	38.0	-	24.26	31.8	56.8
92.14	35.8	-	19.74	-	52.2
87.66	33.4	-	15.25	-	45.7
83.02	32.1	27.5	11.21	31.9	36.9
81.2	31.9	31.8	9.82	31.3	-
78.7	31.9	38.9	8.75	30.4	27.0
67.16	-	60.7	7.80	29.5	24.8
59.95	-	66.2	5.9	27.4	13.8
50.9	31.8	69.0	3.92	22.7	-
44.90	-	68.6	2.00	14.1	-
39.36	31.9	67.3			

Campetti and Delgrosso, 1910

%	sat. t.	%	sat. t.
8.13	26.60	54.67	62.25
13.90	39.15	64.30	60.75
26.14	55.85	71.54	54.95
38.08	62.55	75.42	49.20
43.82	62.75	83.05	29.35
47.85	63.25	87.59	17.55

Hexane (C_6H_{14}) + Phenol (C_6H_6O)

Vondracek 1937

%	f. t.	sat. t.	%	f. t.	sat. t.
100	40.8	-	49.64	-	53.1
98.26	39.6	-	39.95	33.0	52.1
91.93	34.0	-	34.86	-	50.6
87.10	34.2	-	18.50	-	42.6
85.00	33.7	-	13.12	33.1	34.1
82.59	33.2	23.3	9.85	31.9	27.0
80.38	33.15	31.1	7.58	29.7	-
71.58	33.1	45.0	6.76	28.5	-
69.38	-	47.2	4.54	23.6	-
59.98	-	51.1	3.41	19.2	-

Campetti and Delgrosso, 1910			
%	sat.t.	%	sat.t.
11.43	20.75	58.36	38.65
17.06	29.20	50.80	37.65
31.22	37.00	70.02	34.20
35.06	37.65	73.89	31.70
49.86	42.15	82.42	14.40

Poppe, 1934			
C.S.T. sup: = 52.45° dt/dp = -0.0275			

Krishnan, 1937			
C.S.T. = 49% 44.5°			
Depolarisation and relative intensities of dispersion at 44.5 - 71°			

Hexane (C ₆ H ₁₄) + Resorcinol (C ₆ H ₆ O ₂)			
Bingham, 1907			
C.S.T. = 250°			

Hexane (C ₆ H ₁₄) + 1-Menthyl salicylate (C ₁₇ H ₂₄ O ₃)			
Rule and Dunbar, 1935			
%	(α) mol 54.61 (in degrees)	%	(α) mol 54.61 (in degrees)
20°			
4.01	297	45.49	320.3
9.02	300	52.26	321.3
16.84	306	60.13	321.7
27.31	310	69.29	323.6
34.27	313.3	75.23	325.9
36.09	316.7	82.88	327.7
42.11	319.1		

Isohexane (C ₆ H ₁₄) + Phenol (C ₆ H ₆ O)					
Vondracek, 1937					
%	f.t.	sat.t.	%	f.t.	sat.t.
100	40.8	-	14.98	-	38.2
92.98	37.0	-	11.99	33.0	38.8
84.85	34.2	-	11.85	33.0	33.8
81.53	33.4	28.8	9.84	30.5	27.1
80.86	33.2	34.6	8.99	30.1	-
79.00	-	40.8	6.98	27.6	-
74.77	33.2	46.3	5.00	24.2	-
59.17	33.1	55.1	3.85	22.0	-
49.36	-	56.9	3.40	20.2	-
32.79	33.15	54.3	2.49	17.3	-

Heptane (C ₇ H ₁₆) + Phenol (C ₆ H ₆ O)					
Quantie, 1954					
49.% C.S.T. = 35.7°					

Vondracek, 1937.					
%	f.t.	sat.t.	%	f.t.	sat.t.
100	40.8	-	41.99	34.1	48.9
98.46	39.6	-	28.73	-	43.0
93.87	37.1	-	19.72	-	36.6
86.09	34.7	-	13.30	34.1	35.1
83.07	-	25.8	12.37	-	30.2
80.10	34.2	35.1	10.60	32.2	24.3
77.39	-	40.1	9.88	31.1	-
67.09	34.1	49.1	9.26	30.8	-
39.33	-	51.7	4.89	23.1	-
51.25	-	52.7	3.10	17.5	-

Campetti and Delgrosso, 1910			
%	sat.t.	%	sat.t.
20.64	14.45	56.31	23.40
25.98	17.95	66.69	22.05
34.59	20.55	76.19	13.20
42.31	27.35		

Krishnan, 1937			
C.S.T. = 54.2% 41°			
Depolarisation and relative intensities of light dispersion at 41.2 - 74°			

Octane (C_8H_{18}) + Phenol (C_6H_6O)

Campetti and Delgrosso, 1910

%	sat.t.	%	sat.t.
13.28	22.55	52.37	49.35
22.79	37.85	71.14	44.70
23.53	38.15	82.01	30.65
32.89	44.70	85.99	19.65
41.72	47.75		

Isooctane (C_8H_{18}) + Phenol (C_6H_6O)

Drickamer, Brown and White, 1945

mol%		b.t.
L	V	
100	100	182.2
76.20	11.20	125.5
57.30	6.36	113.5
33.40	8.60	108
9.85	5.41	104
4.70	3.07	101
4.54	2.96	101
2.05	1.36	100.5
1.08	0.86	100.5
0.41	0.34	100
0	0	99

Decane ($C_{10}H_{22}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	173.3	
35	168.0	Az
100	182.2	

Diisomyr ($C_{10}H_{22}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	160.1	
20	157.5	Az
100	182.2	

Lecat, 1949

Tridecane ($C_{13}H_{28}$) (b.t. = 234.0) + Phenols

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
o-Xylenol	$C_8H_{10}O$	226.8	58	223.5
Pyrocatechol	$C_6H_6O_2$	245.9	30	228.0
Resorcinol	$C_6H_6O_2$	281.4	8	233.2
o-Nitrophenol	$C_6H_5O_3N$	217.2	94	215.0

Tritetracontane ($C_{43}H_{88}$) + Picric acid ($C_6H_3O_7N_3$)

Rheinboldt, 1939

%	E	f.t.
0.0	83.0	84.5
10.0	81.0	119.0
30.1	82.5	120.0
50.0	82.5	120.0
60.0	82.5	120.0
70.1	82.5	120.0
90.0	92.0	120.0
100.0	121.0	122.0

Liquid petroleum + Thymol ($C_{10}H_{14}O$)

Seidell, 1912

Density at different temperatures.

Cyclopentane (C_5H_{10}) + Diethylresorcinol
($C_{10}H_{14}O_2$)

Eykmán, 1904

c	b. t.
0	49
7.23	50.21
13.03	51.18
15.69	51.61
17.73	51.98
19.48	52.29

Cyclohexane (C_6H_{12}) + Pyrocatechol ($C_6H_6O_2$)

Francis, 1944

C.S.T. = 120°

Methylcyclohexane (C_7H_{14}) + Phenol (C_6H_6O)

Drickamer, Brown and White, 1945

mol%		b. t.
L	V	
760 mm		
100	100	182.2
16.31	3.32	102.8
9.80	2.62	102.2
6.50	2.08	101.7
5.14	1.72	101.7
2.50	0.83	101.1
1.69	0.58	101.1
0	0	100.8

mol%		b. t.
L	V	
760 mm		
98.60	32.25	150
73.90	12.90	130
62.00	11.60	120
34.80	9.12	112
9.74	6.16	105.5
4.82	3.17	102.5
3.89	2.59	102
1.26	0.86	101.5
0.48	0.37	101

Vondracek, 1937

%	sat. t.	%	sat. t.
100	40.8	45.18	26.5
97.42	39.4	38.37	26.2
90.93	35.8	28.05	24.9
82.66	32.7	25.00	24.3
76.46	31.2	20.33	22.6
71.08	30.5	13.64	17.0
64.00	29.5	12.54	15.8
58.93	28.6	9.44	9.8
52.94	27.6		

Decaline ($C_{10}H_{18}$) + Pyrocatechol ($C_6H_6O_2$)

Francis, 1944

C.S.T. = 146

Decaline ($C_{10}H_{18}$) + Benzyl-p-hydroxybenzoate
($C_{14}H_{12}O_3$)

Francis, 1944

C.S.T. = 92

Tetraline ($C_{10}H_{12}$) + Resorcinol ($C_6H_6O_2$)

Francis, 1944

C.S.T. = 94

Isopropyltetraline ($C_{13}H_{18}$) + Hydroquinone
($C_6H_6O_2$)

Francis, 1944

C.S.T. = 235

Isopropyltetraline ($C_{13}H_{18}$) + Salicylalcohol
($C_7H_8O_2$)

Francis, 1944

C.S.T. = 83

Menthene ($C_{10}H_{18}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	170.8	
34	164.5	Az
100	182.2	

Limonene ($C_{10}H_{16}$) (b.t. = 177.7) +
Phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	C_6H_6O	182.2	40.5	168.95
o-Cresol	C_7H_8O	191.1	25	175.3
m-Cresol	C_7H_8O	202.2	5	177.5
p-Cresol	C_7H_8O	201.7	5	177.4
o-Chlor-phenol	C_6H_5OC1	176.8	28	169.5

1-Terpinene ($C_{10}H_{16}$) (b.t.=173.4) + Phenols.
Lecat, 1949

2nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	(C_6H_6O)	182.2	36	166.7
o-Cresol	(C_7H_8O)	191.1	16	172.0
o-Chlor-phenol	(C_6H_5OC1)	176.8	28	169.5

3-Terpinene ($C_{10}H_{16}$) (b.t.=183) + Phenols.
Lecat, 1949

2nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	(C_6H_6O)	182.2	45	172.5
o-Cresol	(C_7H_8O)	191.1	31	179.0
p-Cresol	(C_7H_8O)	201.7	13	181.8

Terpinolene ($C_{10}H_{16}$) (b.t.=184.6) + Phenols

Lecat, 1949

2nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	(C_6H_6O)	182.2	46	172.8
o-Cresol	(C_7H_8O)	191.1	34	179.5
p-Cresol	(C_7H_8O)	201.7	16	183.0

Camphene ($C_{10}H_{16}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	159.6	
22	156.1	Az
100	182.2	

1-Pinene ($C_{10}H_{16}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	155.8	
19	152.75	Az
100	182.2	

1-Pinene ($C_{10}H_{16}$) + o-Chlorphenol (C_6H_5OC1)

Lecat, 1949

%	b.t.	
0	155.8	
5	155.2	Az
100	176.8	

2-Pinene ($C_{10}H_{16}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	163.8	
26	159.0	Az
100	182.2	

Benzene (C_6H_6) + Phenol (C_6H_6O)

Heterogeneous equilibria .

Weissenberger, Schuster and Schuler, 1924

mol%	p
15°	
57	43
50	49
40	52
33.5	54
28.5	55

Mameli, 1903

%	D b.t.	%	D b.t.
4.260	+1.019	8.221	+1.899
4.757	1.132	9.539	2.175
5.571	1.316	9.995	2.269
6.559	1.535	11.123	2.503
7.321	1.706	14.326	3.152

Beckmann, 1888

%	f.t.	%	f.t.
0	5.440	3.82	4.285
0.33	5.325	7.39	3.360
1.19	5.055	14.74	1.645
2.42	4.685	21.11	0.435

Paterno and Ampola, 1997

%	f.t.	E
0.0	+5.55	-
54.80	-2.57	-4.43
56.00	-2.44	-4.395
57.58	-3.88	-4.35
59.13	-5.275	-4.33
60.20	-4.74	-4.33
62.40	-4.05	-4.33
64.31	-3.46	-4.33
65.73	-2.97	-
67.70	-2.43	-
68.45	-2.24	-
100.00	+40.24	-

Mihaly, 1897

%	f.t.	%	f.t.
0	5.91	16.089	1.818
0.942	5.592	17.208	1.598
2.825	5.026	18.965	1.228
8.548	3.543	19.88	0.942
10.454	3.085	20.638	0.852
13.505	2.39	100	40.015
13.67	2.355		

Dahms, 1905

mol%	f.t.	mol%	f.t.
0	+5.345	36.04	-4.74
0.241	5.242	38.44	-1.9
0.501	5.143	49.33	+5.6
1.573	4.785	55.10	9.5
4.939	3.692	61.14	13.6
12.25	+1.715	71.04	20.15
22.05	-0.72	82.10	27.3
31.08	-3.38	93.77	35.22
33.89	-4.05	98.921	38.79
34.8	-4.36	100	39.57

Tsakalotos and Guye, 1910

mol%	f.t.	mol%	f.t.
0	+5.4	54.7	7.7
25.7	-1.5	58.0	11.0
31.8	-3.4	63.5	13.5
37.7	-4.5	66.9	16.0
42.9	-1.8	75.3	21.6
46.3	0.0	86.9	28.3
48.8	+2.7	100	39.5
50.1	3.6		

Rosza, 1911

%	f.t.	%	f.t.
0	5.91	11.417	2.84
1.202	5.51	13.505	2.39
2.825	5.03	15.910	1.82
4.802	4.47	17.206	1.61
6.680	3.97	19.885	0.94
8.548	3.54	21.055	0.80
78.287	27.15	90.350	33.29
80.267	28.15	93.118	34.87
82.144	29.08	95.794	36.82
84.455	30.34	97.690	38.15
87.259	31.85	99.008	39.19
89.157	32.54	100	40.05

Hatscher and Skirrow, 1917			
mol %	f.t.	mol %	f.t.
100	39.4	39.0	-3.6
86.2	30.0	37.3	-5.4
77.2	23.6	34.5	-4.4
70.0	18.4	30.2	-3.0
58.3	11.0	25.6	-1.8
50.2	4.9	18.7	0
43.7	0.6	12.1	+1.65
		0	3.1

Properties of phases	
Philip and Haynes, 1905	
%	d
20°	
0	0.8789
5.32	.8884
13.55	.9053
20.10	.9151
28.58	.9305

Bramley, 1916		
%		d
20°		
0.00		0.8772
6.04		0.8880
9.84		0.8949
20.01		0.9133
32.40		0.9370
42.09		0.9549
53.02		0.9766
63.65		0.9976
74.11		1.0194
83.20		1.0383
100.00		1.0752

Williams and Allgeier, 1927		
%		d
25°		
0		0.8723
3.88		0.8788
8.33		0.8861
12.10		0.8903
15.39		0.8989
22.27		0.9127
26.66		0.9217
38.88		0.9434

Swearingen, 1928		
mol%	25°	d
0.0		0.87362
8.3		0.89112
18.1		0.9118
23.9		0.9236
27.9		0.9313
37.0		0.9477
47.8		0.9710
52.2		0.9794
61.9		0.9988
65.8		1.0065
69.2		1.0147
76.2		1.0271
78.6		1.0340

Martin and Collie, 1932		
mol%		d
25°		
0.000		0.87288
8.590		0.89066
9.043		0.89174
23.653		0.921790
28.108		0.93068
37.384		0.94936
39.741		0.95420
43.543		0.96197
56.014		0.98692
56.047		0.98682

Martin, 1937		
mol%		d
70°		
0.00		0.8246
10.74		0.8475
13.46		0.8534
20.17		0.8681
20.33		0.8680
32.46		0.8942
40.72		0.9119
45.45		0.9215
59.96		0.9520
72.57		0.9781
100.00		1.0307

Padoa and Matteucci, 1914

t	d	f(t)
0 %		
20	0.8710	-
30	0.8680	2.45
40	0.8578	2.61
N/4 of phenol		
30	0.8770	-
40	0.8709	1.91
50	0.8547	1.87
N/2 of phenol		
20	0.8847	-
30	0.8796	1.27
40	0.8748	1.29
N/1 of phenol		
30	0.8854	-
40	0.8823	1.87
50	0.8795	1.80
2 N of phenol		
30	0.9170	-
40	0.9076	1.96
50	0.9040	1.88
3 N of phenol		
30	0.9299	-
40	0.9250	1.93
50	0.9212	1.98
6 N of benzene		
30	0.9744	-
40	0.9700	2.08
50	0.9212	2.00
5 N of benzene		
30	0.9920	-
40	0.9894	1.71
50	0.9870	1.66
4 N of benzene		
30	1.0091	-
40	1.0058	1.75
50	1.0035	1.69
3 N of benzene		
30	1.0253	-
40	1.0225	1.75
50	1.0208	1.63
2 N of benzene		
35	1.0401	-
45	1.0490	1.66
55	1.0486	1.66
1 N of benzene		
38	1.0584	-
48	1.0563	1.63
58	1.0548	1.75
100 % phenol		
45	1.0546	-
55	1.0432	2.01
65	1.0318	2.00

f(t) = temperature coefficient of σ

Morgan and Scarlett, 1917

%	σ
35°	
0	38.033
24.86	32.513
29.88	31.764
35.18	31.038
39.03	30.561
45.00	29.892
50.11	29.400
100	25.991

Weissenberger, Schuster and Shuller, 1924

mol%	η	σ
(water = 1)		
15°		
66.5	2.66	0.440
57	1.97	-
50	1.60	0.428
40	1.24	0.412
33.5	1.08	0.410
28.5	0.97	0.408
25	0.91	0.400

Bramley, 1916

%	η
20°	
0.00	629
6.04	683
9.84	724
20.01	865
32.40	1126
42.09	1401
53.02	1911
63.65	2642
74.11	3811
83.20	5350
100.00	11040

Swearingen, 1928

mol. %	η	σ
25°		
0.0	-	-
8.3	659.2	27.375
18.1	851.6	27.880
23.9	921.8	28.183
27.9	1037.0	28.440
37.0	1157.3	28.867
47.8	1695.7	29.891
52.2	1849.4	30.302
61.9	2540.4	31.418
65.8	2782.8	32.220
69.2	3172.0	32.776
76.2	3936.0	33.866
78.6	4423.9	34.211

Udovenko and Toropov, 1940

mol %	η
25°	
100	9023.4
75	3869.0
50	1806.3
25	966.6
0	602.5
75	3851.2
50	1800.3
25	967.5
75	3824.2
50	1806.3
25	967.5

Martin and Collie, 1932

mol %	n_{H_2}
25°	
0.000	1.49312
8.590	1.49776
9.043	1.49809
23.653	1.50631
28.108	1.50864
37.384	1.51365
39.741	1.51496
43.543	1.51693
56.014	1.52330
56.047	1.52335

Philip and Haynes, 1905

%	ϵ
20°	
0	2.29
5.32	2.493
13.55	2.871
20.10	3.252
28.58	3.805

Williams and Allgeier, 1927

%	ϵ
25°	
0	2.280
3.88	2.403
8.33	2.567
12.10	2.765
15.39	2.915
22.27	3.300
26.66	3.602
38.88	4.664

Martin, 1937

mol %	ϵ
70°	
0.00	2.193
10.74	2.540
13.46	2.639
20.17	2.934
20.33	2.943
32.46	3.567
40.72	4.063
45.45	4.375
59.96	5.458
72.57	6.517
100.00	9.161

Wulff and Takashima, 1938 (fig.)

mol %	ϵ
18° - 20°	
0	2.30
10	2.70
20	3.30
30	4.10
34	4.50

Mecke and Zeininger, 1948 (fig.)

mol %	$\kappa \cdot 10^8$
10	0.0001
25	0.0018
50	0.063
75	3.16
100	17.8
%	τ
10	+0.015
30	+0.007
50	0.000
60	-0.002
70	-0.001
90	+0.003

Heat constants.		
Timofeev, 1905		
%	U	
20°		
0	0.4233	
20	0.441	
47.3	0.470	
Q dil		
initial	final	(mole phenol)
0	0.23	-4.36
0.23	0.65	-4.19
0.65	1.09	-4.35
1.09	1.95	-4.11
1.95	2.77	-4.02
0	2.22	-4.31
2.22	4.31	-3.98
4.31	6.34	-3.72
6.34	8.24	-3.53
8.24	10.06	-3.39
11.05	13.0	-3.05
13.0	14.84	-3.02
14.84	16.6	-2.96
16.6	18.3	-2.92
18.3	20.0	-2.81
41.7	42.9	-2.57
42.9	44.1	-2.56
44.1	45.2	-2.54
45.2	46.3	-2.53
46.3	47.3	-2.53

Benzene (C ₆ H ₆) + Pyrocatechol (C ₆ H ₆ O ₂)		
Walker, Collett and Lazzell, 1931		
mol%	f. t.	f. t.
100.00	104.5	82.0
83.59	97.0	77.2
74.85	93.3	70.6
61.32	88.9	59.6
48.52	85.1	25.0

Benzene (C ₆ H ₆) + Hydroquinone (C ₆ H ₆ O ₂)		
Walker, Collett and Lazzell, 1931		
mol%	f. t.	f. t.
100.00	172.9	154.1
81.68	163.8°	143.2
75.06	161.0	141.2
68.03	158.8	25.0
L ₁ + L ₂		

Benzene (C ₆ H ₆) + Resorcinol (C ₆ H ₆ O ₂)		
Rothmund, 1908		
%	sat. t.	f. t.
0	-	5.4
3.18	73	-
4.75	77	60.92
6.97	82	71.15
13.97	92.15	-
24.74	105.27	-
37.44	108.95	95.5
48.04	108.95	-
61.70	104.42	95.5
65.76	100.30	-
74.39	80.25	-
77.64	69.87	96.5
83.46	39.35	98.5
90.23	-	101
100	-	110

Walker, Collett and Lazzell, 1931		
mol%	f. t.	
100.00	109.4	L ₁ + L ₂
85.17	101.7	
68.56	97.3	
9.34	93.4	
5.16	87.4	
2.95	79.3	
2.02	72.6	
1.14	61.1	
0.244	25.0	
triple point = 95.9°		

Bingham, 1907		
C.S.T. = 109°		

Timmermans and Kohnstamm, 1909 - 1910		
C.S.T. = 109.10° dt/dp (10 -170Kg/cm ²) = -0.03		

Francis, 1944		
C.S.T. = 100		

Schukarew, 1910			
%	U	%	U
20° - 110°			
81.88	0.8129	45.40	0.6573
72.50	0.7022	39.89	0.6339
62.08	0.7089	22.41	0.5640

Benzene (C ₆ H ₆) + o-Cresol (C ₇ H ₈ O)			
Weissenberger and Piatti, 1924			
mol%	ρ	mol%	p
18°			
91	12.2	50	46.8
80.5	22.4	47	49.3
71.5	30.0	33.5	56.8
63	37.0	24.5	61.1
54	44.0	23	64.5

Piatti, 1936			
mol%	b. t.	mol%	b. t.
100	190.7	40	91.3
90	154.2	30	86.8
80	129.7	20	83.7
70	113.6	10	81.3
60	103.0	0	80.1
50	96.9		

Glass and Madgin, 1934 (fig.)			
%	f. t.	%	f. t.
0	+5.4	60	+5.5
10	+2.5	70	11
20	-2	80	18
30	-5.5	90	24
39.5	-7.4 E	100	30.5
50	-0.5		

Weissenberger and Piatti, 1924			
mol%	η (water=1)	mol%	σ (water=1)
18°		20°	
84	8.84	100	0.459
70	3.06	69.5	0.447
58	2.15	43.5	0.440
43.5	1.50	30.5	0.433
38.5	1.38	22.5	0.427
30.5	1.18	15.5	0.418
		0.0	0.399
22.5	0.94		
18	0.95		
16	0.79		
12	0.73		
0	0.55		

 | Philip and Haynes, 1905 | | | | |-------------------------|--------|-------|--| | % | d | ε | | | 20° | | | | | 0 | 0.8789 | 2.21 | | | 5.40 | 0.8869 | 2.441 | | | 10.01 | 0.8942 | 2.574 | | | 14.72 | 0.9021 | 2.701 | | | 23.73 | 0.9153 | 3.001 | | | Pushin and Matavulj, 1932 | | | | |---------------------------|----------------|------|----------------| | % | n _D | % | n _D | | 16.5° | | | | | 0 | 1.5033 | 67.4 | 1.5324 | | 13.8 | 1.5089 | 76.4 | 1.5366 | | 27.3 | 1.5145 | 84.5 | 1.5403 | | 38.6 | 1.5194 | 92.6 | 1.5443 | | 48.4 | 1.5236 | 100 | 1.5478 | | 57.9 | 1.5278 | | | | Benzene (C ₆ H ₆ O) + m-Cresol (C ₇ H ₈ O) | | | | |--|------|------|------| | Weissenberger and Piatti, 1924 | | | | | mol% | p | mol% | p | | 18° | | | | | 91 | 14.4 | 50 | 58.0 | | 80.5 | 27.1 | 40 | 64.8 | | 73 | 37.8 | 28.5 | 79.8 | | 58 | 50.2 | 22 | 72.5 | | 54 | 54.9 | 0 | 68 | | Piatti, 1936 | | | | |--------------|-------|------|-------| | mol% | b. t. | mol% | b. t. | | 100 | 201.5 | 40 | 92.2 | | 90 | 160.0 | 30 | 87.7 | | 80 | 134.5 | 20 | 84.2 | | 70 | 116.6 | 10 | 81.8 | | 60 | 105.5 | 0 | 80.1 | | 50 | 98.0 | | | | Kremann and Borjanovics 1916 | | | | |------------------------------|-------|------|-------| | % | f. t. | % | f. t. | | 0 | +5.4 | 56.7 | -14.5 | | 5.3 | +3.3 | 61.7 | -18.3 | | 15.3 | +0.5 | 70.9 | -19.6 | | 25.8 | -2.2 | 79.1 | -13.0 | | 39.2 | -7.1 | 88.9 | -4.1 | | 50.4 | -11.2 | 100 | +5.0 | | 53.5 | -13.0 | | | |

Philip and Haynes, 1905			
%		d	
20°			
0		0.8789	
4.55		0.8853	
13.60		0.8977	
19.62		0.9061	

Kremann, Gugl and Meingast, 1914			
mol%		d	
12°			
100.0	1.0402	1.0014	
75.0	1.0078	0.9640	
50.0	0.9692	0.9245	
25.0	0.9273	0.8790	
0.0	0.8866	0.8309	

Kremann and Meingast, 1914			
t	d	t	d
0 mol%			
10.5	0.8880	25 mol%	
20.5	0.8776	10.5	0.9283
30.0	0.8670	20.0	-
40.0	0.8562	21.5	0.9180
47.6	0.8481	32.0	0.9083
50.0	0.8455	40.2	0.9006
60.0	0.8348	40.5	0.9005
70.0	0.8241	50.0	0.8918
73.0	0.8209	60.0	0.8825
80.0	0.8134		
50 mol%			
20.0	0.9622	16.5	1.0040
30.0	0.9536	20.0	-
40.0	0.9450	21.8	0.9996
50.5	0.9360	31.5	0.9910
60.0	0.9280	40.5	0.9835
100 mol%			
17.0	1.0367	50.5	0.9750
19.0	1.0350	53.5	0.9725
30.0	1.0268	60.0	-
40.0	1.0195	60.8	0.9665
50.0	1.0120		
60.0	1.0045		

Kremann, Meingast and Gugl, 1914			
mol%		d	
20°			
0	1.0493	(1-0.000711 t)	
25	1.0180	(1-0.000767 t)	
66.7	0.9795	(1-0.000878 t)	
75	0.9381	(1-0.000980 t)	
100	0.8993	(1-0.001192 t)	

Weissenberger and Borjanovics, 1916			
%		d	
9.5°			
0	0.816	0.888	
16.7	0.845	0.908	
33.3	0.874	0.935	
49.0	0.897	0.960	
63.4	0.928	0.983	
82.2	0.969	1.022	
100	0.998	1.042	

Trew and Spencer, 1936 and 1937			
mol%		d	
0°			
0		0.9722	
10.65		0.9916	
29.04		0.9532	
40.73		0.9422	
46.78		0.9510	
58.06		0.9670	
73.54		0.9892	
88.57		1.0051	
100		1.0302	

Trew and Spencer, 1936 and 1937			
mol%		d	
25°			
0		0.8702	
9.3		0.8978	
17.5		0.9026	
26.3		0.9177	
35.5		0.9350	
45.1		0.9487	
56.0		0.9672	
66.1		0.9806	
75.3		0.9977	
88		1.0142	
100		1.0293	

Kremann, Gugl and Meingast, 1914

mol%	η	
	12°	64°
100.0	29610	1889
75.0	8230	1038
50.0	2930	701
25.0	1238	536
0.0	725	375

Piatti, 1931

mol%	η			
	0°	10°	20°	30°
100	95000	43900	20800	10000
90	43200	16200	8330	6410
80	20800	9930	5630	4620
70	11900	6750	4120	3380
60	7010	4590	3140	2500
50	4440	3190	2440	1940
40	3180	2240	1890	1530
30	2180	1690	1420	1220
20	1640	1400	1300	1060
10	1250	1180	1000	952
0	1160	1050	958	883

	40°	50°	60°	
100	6180	4380	3370	
90	4100	3160	2600	
80	3100	2600	2120	
70	2460	2110	1720	
60	2000	1750	1460	
50	1620	1470	1230	
40	1320	1250	1180	
30	1110	1050	1010	
20	962	901	899	
10	851	812	783	
0	820	768	725	

Weissenberger and Piatti, 1924

mol%	η (water=1)	mol%	σ (water=1)
	18°		20°
83.5	4.70	100	0.437
69.5	3.49	69.5	0.425
60	2.91	60	0.420
53.5	2.38	51	0.418
43	1.58	43	0.415
27.5	1.08	27	0.412
20	1.01	20	0.410
0	0.55	0	0.399

Kremann and Meingast, 1914.

t	σ
0 mol%	
10.5	29.89
20.5	28.93
30.0	27.72
40.0	26.50
47.6	25.25
50.0	25.17
60.0	24.02
70.0	22.96
73.0	22.05
80.0	21.05
25 mol%	
10.5	31.08
20.0	30.00
21.5	29.99
32.0	28.67
40.2	27.83
40.5	27.88
50.0	26.75
60.0	25.50
50 mol%	
20.0	31.89
30.0	30.86
40.0	29.92
50.5	28.84
60.0	28.20
75 mol%	
16.5	34.62
20.0	34.3
21.8	34.02
31.5	33.09
40.5	32.49
50.5	31.72
53.5	31.19
60.0	30.7
60.8	30.71
100 mol%	
17.0	35.78
19.0	35.52
30.0	34.53
40.0	33.24
50.0	32.19
60.0	35.32

Pushin and Matavulj, 1932			
%	n_D	%	n_D
16.5°			
0	1.3033	66.9	1.5284
14.1	1.5082	76.6	1.5322
26.7	1.5126	84.0	1.5353
37.3	1.5165	92.5	1.5389
47.0	1.5205	100	1.5419
57.2	1.5245		

Trew and Spencer, 1936

mol %	n_D
25°	
0	1.49591
8.3	.50044
17.6	.50525
26.3	.50934
35.6	.51019
45.1	.51869
56.0	.52319
66.1	.52619
76.8	.53150
88	.53491
100	.53812

Philip and Haynes, 1905

%	ϵ
20°	
0	2.21
4.55	2.444
13.60	2.796
19.62	3.090

Kerr, 1926

vol %	ϵ
16°	
0	2.28
20	3.28
40	4.82
60	6.95
80	9.86
100	12.95

Trew and Spencer, 1937

mol %	χ
0°	
0	0.710
10.65	0.705
26.04	0.696
40.73	0.692
46.78	0.689
58.06	0.685
73.64	0.677
88.67	0.671
100	0.672

Kremann, Meingast and Gugl, 1914

%	U	Q mix (cal/g)
16°		
46	0.490	-2.250 +2.250

Trew and Spencer, 1936

mol %	U	Q mix (cal/g)
0	0.474	-
24.3	0.455	2.05
40.4	0.452	2.53
69.8	0.479	2.39
76.7	0.487	2.28
88.9	0.464	1.60
100	0.515	-

Benzene (C_6H_6) + p-Cresol (C_7H_8O)

Wiessenberger and Piatti, 1924

mol %	p	mol %	p
18°			
91	15.3	50	52.7
80.5	27.3	37	60.0
71.5	34.6	30	64.7
63	43.0	20	68.4
54	49.9	0	68

Piatti, 1936

mol %	b.t.	mol %	b.t.
100	202.2	40	92.4
90	160.6	30	87.8
80	134.5	20	84.2
70	117.5	10	81.8
60	105.8	0	80.1
50	98.2		

Kendall and Beaver, 1921

%	f. t.
0	5.600
1.34	5.010
2.83	4.420
4.44	3.909
6.31	3.375
7.89	2.975
9.77	2.498
11.87	2.031
14.03	1.535

Weissenberger and Piatti, 1924

mol %	η (water=1)
20°	
71	5.01
60.5	3.27
43.5	1.89
39.5	1.58
35	1.39
25	1.00
17	0.86
11.5	0.78
0	0.55

mol %	σ (water=1)
20°	
100	0.437
60.5	0.425
43	0.421
39	0.419
34.5	0.399
25	0.410
17	0.405
0	0.399

Philip and Haynes, 1905

%	ϵ	d
20°		
0	2.21	0.8789
5.49	2.495	0.8867
13.48	2.814	0.8982
16.08	2.936	0.9017
21.68	3.231	0.9098

Benzene (C_6H_6) + Thymol ($C_{10}H_{14}O$)

Zoppellari, 1905

t	%	d	n_D
5.3	6.2323	0.89964	1.51107
7.0	14.4314	0.90451	1.51117
7.6	21.0144	0.90990	1.51199
12.5	37.7608	0.92039	1.51375

Timofeev, 1905

%	U
0	0.4233
16.2	0.426

initial	% Final	Q dii (mole/thymol)
0	2.9	-5.67
2.9	5.6	5.49
5.6	8.2	5.34
8.2	10.7	5.26
10.7	13.0	5.15
13.0	15.2	5.01

Benzene (C_6H_6) + Guaiacol ($C_7H_8O_2$)

Weissenberger, Henke and Dregmann, 1925

mol%	p	η (water=1)	σ
20°			
67	28.4	2.4	0.58
50	41.6	1.5	0.55
40	47.4	1.2	0.53
34	51.7	1.1	0.52
25	53.6	0.9	0.51
0	68.4		

Pushin and Rikovski, 1937

mol%	f. t.	mol%	f. t.
0	+5.2	60	+5
10	+1.5	70	+11
20	-2.5	80	17
30	-6	90	22.5
40	5	100	28
50	0		
E 35 mol%	-7.5°		

Pushin and Pinter, 1929

mol%	d	η
	30°	
100	1.11236	4450
90	1.1088	3400
80	1.0812	2490
70	1.0596	1970
60	1.0349	1570
50	1.0084	1250
40	0.9823	1040
30	0.9544	873
20	0.9280	742
10	0.8997	641
0	0.8672	569

Paschin and Matavulj, 1932

%	n_D	%	n_D
	16.5		
0	1.5033	70.5	1.5306
16.6	1.5088	79.0	1.5346
27.0	1.5123	86.0	1.5382
40.8	1.5178	93.4	1.5418
52.2	1.5225	100	1.5452
61.2	1.5266		

Benzene (C₆H₆) + Salicylaldehyde (C₇H₆O₂)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η	σ
		(water=1)	
		20°	
80	19.4	1.8	0.62
67	29.1	1.5	0.59
50	39.6	1.2	0.55
34	47.6	1.0	0.52
25	52.7	-	-
20	55.0	0.9	0.51
0	68.4	-	-

Sidgwick and Allott, 1923

%	f.t.	%	f.t.
0.0	5.32	20.4	-3.35
4.35	3.65	25.0	-5.40
8.23	2.15	31.4	-8.20
10.90	1.00	39.2	-12.15
15.0	-0.60		

Benzene (C₆H₆) + m-Hydroxybenzaldehyde
(C₇H₆O₂)

Sidgwick and Allott, 1923

%	f.t.	%	f.t.
0	5.32		
6.29	61.3	40.0	79.1
10.42	67.1	52.5	82.4
16.6	71.2	59.5	83.6
27.4	75.7	77.2	89.8
		100.0	106.0

Benzene (C₆H₆) + p-Hydroxybenzaldehyde
(C₇H₆O₂)

Sidgwick and Allott, 1923

%	f.t.	%	f.t.
0	5.32	46.0	89.5
3.64	65.0	58.8	93.5
11.09	81.4	72.6	100.6
20.0	84.1	100.0	116.0
31.1	86.7		

Benzene (C₆H₆) + Hydroxytolualdehydes (C₈H₈O₂)

Sidgwick and Allott, 1923

%	f.t.	%	f.t.	%	f.t.
	1.2.5		1.4.5		1.4.6
0.0	5.32	0	5.32	0	5.32
5.56	3.45	2.27	97.2	4.94	54.7
11.50	1.30	7.08	66.7	8.19	67.5
17.0	-0.60	11.7	72.4	17.5	72.9
21.5	-2.40	18.8	76.0	33.2	75.7
27.4	+0.15	26.9	79.8	53.3	81.8
34.0	6.05	38.6	83.7	67.5	86.7
41.7	11.5	48.4	85.8	71.5	89.1
55.4	21.6	63.0	92.1	100.0	108.9
64.4	28.0	73.9	98.2		
71.0	31.8	100.0	117.4		
90.9	46.4				
100.0	55.1				

E : 23.3% -3.0

Benzene (C_6H_6) + Methyl salicylate ($C_8H_8O_3$)

Innes, 1918

wt%	mol%	p
75°		
0	0	649.0
5.10	2.69	631.9
11.92	6.49	608.5
16.06	8.94	592.5
23.9	13.9	560.9
31.05	18.7	532.0
0	0	651.8
52.0	32.4	433.8
60.9	44.4	382.9
71.1	55.6	313.7
82.1	70.0	223.3

Paterno, 1889

%	D f. t.
1.27	-0.485
3.09	1.135
12.32	4.485
14.35	5.16

Glowaski and Lynch, 1933

%	d	%	d
25°			
0.000	0.8724	51.39	1.0551
10.16	0.9136	59.80	1.0796
18.00	0.9434	70.61	1.1089
29.07	0.9838	81.36	1.1337
39.47	1.0188	100.00	1.1798

Kalinowski, 1933

M	d	ϵ
13.2°		
0	0.88639	2.29
11.132	0.91158	2.79
20.762	0.93386	3.32
31.156	0.96212	3.95
39.811	0.98635	4.49
49.939	1.01346	5.16
59.092	1.04293	5.84
70.623	1.08023	6.72
79.172	1.11023	7.45
88.551	1.15192	8.39
100.000	1.19110	9.35

40.2°

0	0.85711	2.24
10.52	0.87664	2.77
19.951	0.90455	3.12
30.312	0.93245	3.67
40.232	0.95876	4.20
50.102	0.98232	4.87
57.989	1.01491	5.39
70.123	1.04940	5.94
80.341	1.08751	6.87
90.442	1.12572	7.77
100.000	1.16490	8.64

Benzene (C_6H_6) + Ethyl salicylate ($C_9H_{10}O_3$)

Kalinowski, 1933

mol%	d	ϵ
40.2°		
0	0.85711	2.24
11.067	0.87982	2.80
22.181	0.903375	3.30
31.716	0.924560	3.79
39.272	0.942841	4.20
51.315	0.971852	4.87
60.276	0.994581	5.41
69.309	1.012431	5.94
80.173	1.049610	6.66
89.000	1.076712	7.22
100	1.111231	8.02

Benzene (C_6H_6) + Phenyl salicylate ($C_{13}H_{10}O_3$)

Kalinowski, 1933

mol%	d	ϵ
40.2°		
0	0.85711	2.24
9.838	0.88328	2.72
16.853	0.90177	2.94
29.855	0.93853	3.36
38.878	0.96676	3.63
49.993	0.99788	3.97
59.992	1.03161	4.32
69.992	1.10416	4.87
80.008	1.10416	5.25
90.031	1.14642	5.76
100	1.18221	6.20

Benzene (C_6H_6) + Ethyl-p-hydroxybenzoate

Innes, 1918

($C_9H_{10}O_3$)

wt%	mol%	p
75°		
0	0	651.6
4.91	2.38	639.8
10.4	5.17	631.9
19.8	10.4	619.5
30.0	16.8	604.6
41.7	25.2	580.6

Benzene (C₆H₆) + β -Naphthol (C₁₀H₈O)

Kuriloff, 1897

mol%	f. t.	mol%	f. t.
100	121.0	25.1	77.4
79.0	112.5	17.8	71.5
71.6	106.5	14.6	67.0
51.8	95.3	3.60	32.5
44.8	89.8	1.83	12.0
39.3	87.0		

Benzene (C₆H₆) + o-Chlorphenol (C₆H₅OC1)

Sidgwick and Turner, 1922

%	f. t.	%	f. t.
0	5.3	63.83	-17.14
3.04	4.6	64.90	16.4
8.33	2.7	69.05	13.7
15.49	0	80.32	7.0
24.56	-3.2	84.72	3.8
29.01	5.0	90.26	+0.2
45.22	11.6	95.20	3.6
55.54	16.5	97.65	5.6
60.68	18.8	100	7.0
62.50	-18.5		

E : 61.5% -19.5°

Puschin and Matavulj, 1932

%	n _D	%	n _D
16.5°			
0	1.5033	71.3	1.5400
16.8	1.5104	78.9	1.5453
29.8	1.5163	86.3	1.5506
42.0	1.5225	93.3	1.5559
52.4	1.5293	100.0	1.5612
62.7	1.5348		

Benzene (C₆H₆) + m-Chlorphenol (C₆H₅OC1)

Sidgwick and Turner, 1922

%	f. t.	%	f. t.
0	5.3	44.90	-8.4
4.31	4.0	47.78	1.5
7.00	3.2	50.68	0
15.32	0.5	51.81	+0.6
21.40	-1.4	57.02	3.4
26.29	2.9	64.65	7.4
31.77	4.5	70.00	10.7
36.82	6.0	75.10	14.2
38.39	6.5	83.68	20.0
40.92	7.2	89.89	24.6
41.66	7.5	96.50	29.8
41.66	5.3	100	32.5
43.62	-4.0		

E : 40% -7.0°

Benzene (C₆H₆) + p-Chlorphenol (C₆H₅OC1)

Weissenberger, Schuster and Lielacher, 1925

mol%	p
20°	
0	74.7
10	68.2
20	63.2
30	59.0
40	53.8
50	46.7

Sidgwick and Turner, 1922

%	f. t.	%	f. t.
0	-5.4	50.10	6.0
2.98	-4.5	55.24	9.6
10.25	-2.4	60.54	12.9
15.10	-1.0	68.58	18.0
17.62	-0.2	73.13	20.8
29.14	-3.2	80.06	25.8
35.50	-5.0	86.65	30.5
38.07	-5.4	90.63	33.6
39.67	-3.2	95.52	37.5
45.65	+2.8	100	41.0

E : 37.5% -5.5°

Benzene (C₆H₆) + o-Aminophenol (C₆H₇ON)

Sidgwick and Callow, 1924

%	f. t.	%	f. t.
3.87	114.9	49.3	155.7
9.02	132.2	39.7	158.4
16.01	141.8	69.8	161.5
23.2	146.8	80.4	165.2
29.3	149.7	87.6	168.2
34.1	151.5	100	177
41.3	153.6		

Benzene (C₆H₆) + m-Aminophenol (C₆H₇ON)

Sidgwick and Callow, 1924

%	f. t.	sat. t.
4.87	96.5	-
10.4	105.4	-
10.4	-	100.8
10.3	-	114.3
31.3	-	121.2
37.7	-	122.1
40.0	-	122.3
46.1	-	122.1
50.9	-	121.9
59.0	-	119.3
68.9	-	111.2
72.5	-	110.8
72.5	-	105.8
76.4	-	111.4
76.4	-	96.9
82.6	116.4	-
91.8	122.1	-

C.S.T. = 122.3

Triple point. = 16.5 - 69.9% 110.6°

Benzene (C₆H₆) + p-Aminophenol (C₆H₇ON)

Sidgwick and Callow, 1924

%	f. t.	%	f. t.
3.16	103	40.1	143
7.56	124	51	145
11.6	130	60.9	149
20.4	135	69.2	154
30.4	138.5	100	186

Benzene (C₆H₆) + o-Nitrophenol (C₆H₅O₃N)

Shakhparonov and Martinova, 1953

mol%	P		
	15°	17°	20°
0	57.83	63.86	74.05
5	56.85	62.32	74.05
10	56.16	60.95	71.25
15	52.64	57.77	67.90
20	49.67	54.82	63.82
25	48.29	53.08	62.39
30	-	-	56.94

mol%	d vapour (mg/cc)		
	15°	17°	20°
0	0.2520	0.2641	0.3039
5	0.2470	0.2580	0.3039
10	0.2440	0.2520	0.2920
15	0.2272	0.2392	0.2780
20	0.2160	0.2266	0.2618
25	0.2100	0.2198	0.2555
30	-	-	0.2332

Bogojawlensky, Bogoljubow and Winogradow, 1906

%	f. t.	%	f. t.
100	44.5	36.7	3.2
90.4	37.2	31.2	-2.4
77.2	28.7	25.7	3.8
65.4	21.9	19.4	2.1
59.2	18.0	15.9	-0.5
53.1	14.3	12.0	+1.1
47.0	10.4	6.6	3.1
40.9	6.5	0	+5.4

E = -4.4

Carrick, 1922

%	f. t.	%	f. t.
100	44	59.72	20.1
89.73	40.1	50.94	14.1
84.88	34.6	40.51	6.0
78.51	30.1	31.45	0
72.79	26.9		

Benzene (C₆H₆) + m-Nitrophenol (C₆H₅O₃N)

Bogojawlensky, Bogoljubow and Winogradow, 1906

%	f. t.	%	f. t.
100	95.2	29.8	68.1
90.4	89.6	20.2	63.3
81.3	84.8	10.9	53.1
71.4	80.8	8.6	48.8
50.9	74.3	4.8	38.3
39.6	70.8	1.0	5.2

E : +5.2

Carrick, 1922

%	f. t.	%	f. t.
100	93	17.37	57.5
89.55	87.8	9.18	48.0
84.98	85.0	4.75	38.0
79.05	81.5	1.79	22.0
54.63	74.0	0.62	6.0
31.48	66.0		

Benzene (C₆H₆) + p-Nitrophenol (C₆H₅O₃N)

Bogojawlensky, Bogoljubow and Winogradow, 1906

%	f. t.	%	f. t.
100	111.4	28.9	80.6
89.0	102.9	20.2	76.4
81.2	98.2	14.2	71.5
70.4	92.0	10.6	66.4
58.7	88.5	6.6	58.5
50.4	86.3	0	5.4
41.5	83.8		

Carrick, 1922

%	f. t.	%	f. t.
100	114	8.08	65.5
91.54	104.2	5.08	59.4
80.00	96.5	2.75	41.3
56.05	91.0	1.63	32.1
38.09	85.41	0.95	20.1
20.11	78.5	0.64	8.0
13.78	73.5		

Benzene (C₆H₆) + Dinitrophenols (C₆H₄O₅N₂)

Sidgwick and Aldous, 1921; Sidgwick and Taylor, 1922

%	f. t.	%	f. t.	%	f. t.
2,3		2,4		2,5	
100	145.1	100	112.9	100	105.6
91.57	134.9	93.61	105.6	92.90	98.5
69.05	118.6	86.59	99.5	82.44	88.6
38.66	102.5	79.00	93.9	72.97	82.4
25.30	93.8	69.52	87.2	54.78	71.4
12.77	78.7	62.77	83.7	48.91	67.9
0	5.5	52.36	77.1	35.81	57.0
		34.60	65.0	24.22	48.5
		21.01	51.0	13.96	33.5
		0	5.5	0	5.5

2,6		3,4		3,5	
100	62.2	100	134.7	100	126.1
92.85	55.0	86.64	122.6	94.20	116.0
86.87	50.0	73.10	116.1	83.73	162.8
78.52	44.5	60.49	113.0	73.08	103.4
60.17	34.0	56.86	112.1	51.13	97.7
43.36	25.5	41.65	109.1	32.63	94.4
		27.27	106.5	20.13	85.0
		6.54	89.2	6.39	60.9

Benzene (C₆H₆) + Picric acid (C₆H₃O₇N₃)

Kuriloff, 1897

mol%	f. t.	mol%	f. t.
100	122.2	48.1	82.8
89.9	116.0	45.9	81.4
84.5	111.0	37.6	77.0
63.2	95.1	20.2	67.0
56.6	88.8	7.59	40.4
52.2	86.4	5.69	34.9
51.9	85.6	2.10	15.0
51.1	85.1	1.74	10.0
48.8	83.8	0	5.02

Findlay, 1902

%	f. t.	%	f. t.
3.57	5	20.72	38.4
5.09	10	25.13	45
6.79	15	33.62	55
8.71	20	36.88	58.7
11.23	25	41.63	65
11.90	26.5	49.18	75
17.61	35		

Piatti, 1931

%	f. t.
15.8	40
12.4	35
10.0	30
8.2	25
6.7	20
4.4	10
3.6	6

Toluene (C_7H_8) + Phenol (C_6H_6O)

Weissenberger, Schuster and Schüler, 1924

mol%	p
25°	
57.5	7.1
50	8.4
39.2	10
33.3	11
25	13

Drickamer, Brown and White, 1945

mol%			mol%		
L	V	b.t.	L	V	b.t.
760mm					
100	100	182.2	5.37	26.00	119.7
65.90	95.65	172.8	4.64	22.70	119.4
48.80	91.28	159.4	4.55	19.88	115.5
37.90	88.14	153.9	2.50	11.60	112.8
37.50	87.52	149.4	2.04	8.92	112.2
21.50	78.10	142.2	1.39	6.06	113.3
19.30	72.50	133.9	0.52	2.30	111.1
12.75	59.20	128.3	0.20	0.90	111.1
10.99	52.00	126.7	0.14	0.61	110.6
8.41	41.02	122.2	0.07	0.27	110.6
7.20	36.52	120.3	0	0	110.5
7.40	34.88	120.0			

Paterno, 1896

%	D f.t.
99.53	-0.36
98.66	0.97
96.27	2.68
92.89	5.09
89.55	7.44
86.30	9.62
80.88	13.32

Weissenberger, Schuster and Schüler, 1924

mol%	σ	mol%	η
(water = 1)			
15°			
57	0.410	57.5	2.08
50	0.405	39.2	1.19
60	0.401	49.5	1.60
33.3	0.400	32.6	1.01
25	0.400	27.8	0.92
		24.3	0.90

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
45°			
0	1.4827	50.1	1.5165
10.1	1.4939	60.6	1.5228
20.3	1.4990	70.1	1.5282
29.0	1.5053	80.1	1.5339
40.6	1.5106	90.0	1.5402

Toluene (C_7H_8) + o-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	8.82
50	11.4
40	13.5
33.3	14.0
28.6	14.6
25	15.0
22.2	15.1
0	17.0

mol%	η	σ
15°		
66.7	3040	33.99
50.0	1790	35.46
40.0	1320	38.10
33.3	1210	33.04
28.5	1050	32.97
25.0	990	33.33
22.2	910	34.43
0	709	29.83

Pushin, Matavulj and Rikovski, 1948

%	n_D
30°	
0	1.4913
12.2	1.4964
23.2	1.5018
33.7	1.5067
44.1	1.5116
53.4	1.5167
63.3	1.5216
73.0	1.5268
82.2	1.5317
91.0	1.5366
100	1.5413

Toluene (C_7H_8) + m-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	7.62
50	11.3
40	13.2
33.3	13.9
28.6	14.4
25	14.8
22.2	15.0
0	17.0

Kremann, Meingast and Gugl, 1914

mol%	d
0	0.8824 (1-0.000982 t)
25	0.9271 (1-0.000991 t)
50	0.9676 (1-0.000881 t)
75	1.0088 (1-0.000928 t)
100	1.0493 (1-0.000711 t)

Kremann and Meingast, 1914

t	d
Q mol%	
17.0	1.0367
19.0	1.0350
30.0	1.0268
40.0	1.0195
50.0	1.0120
60.0	1.0045
25 mol%	
10.0	1.0003
20.0	-
20.5	0.9920
44.5	0.9723
35.0	0.9800
40.0	0.9760
50.0	0.9680
60.0	0.9600
50 mol%	
15.5	0.9544
20.0	-
20.5	0.9500
30.0	0.9420
40.0	0.9334
50.0	0.9248
60.0	0.9163

75 mol%

17.0	0.9111
21.0	0.9075
26.8	0.9021
35.0	0.8948
45.0	0.8853
45.0	0.8853
50.0	0.8809
61.0	0.8708

100 mol%

20.0	0.8650
30.0	0.8565
40.5	0.8471
50.0	0.8397
60.0	0.8300
69.5	0.8215
75.5	0.8161

Kremann, Gugl and Meingast, 1914

mol%	d
12°	
0.0	0.8724
25.0	0.9158
20.0	0.9572
75.0	0.9987
100.0	1.0402
64°	
0.0	0.8264
25.0	0.8681
50.0	0.9130
75.0	0.9569
100.0	1.0014

Trew and Spencer, 1936

mol%	d
25°	
0	0.8596
11.32	0.8788
22.24	0.8978
33.94	0.9186
45.06	0.9386
54.56	0.9556
76.12	0.9922
87.74	1.0120
100	1.0302
28°	
0	0.8562
12.5	0.8786
16.1	0.8847
31.0	0.9111
41.5	0.9307
37.8	0.9401
57.6	0.9570
68.6	0.9754
77.6	0.9906
89.1	1.0082
100	1.0292

Kremann, Meingast and Gugl, 1914

mol%	Dv	
	20°	70°
25	+0.2	+0.2
50	+0.1	+0.05
75	+0.05	-

Kremann and Meingast, 1914

t	σ
0 mol%	
17.0	35.73
19.0	35.52
30.0	34.53
40.0	33.24
50.0	32.59
60.0	32.19
25 mol%	
10.0	34.17
20.0	-
20.5	33.98
35.0	31.20
40.0	32.14
44.5	31.79
50.0	30.89
60.0	30.16
50 mol%	
15.5	31.52
20.0	-
20.5	31.30
30.0	30.27
40.0	29.38
50.0	28.53
60.0	27.70
75 mol%	
17.0	29.60
21.0	29.45
26.8	28.93
35.0	27.93
45.0	27.24
45.0	27.34
45.0	26.74
50.0	25.65
61.0	-
100 mol%	
20.0	28.32
30.0	27.12
40.5	25.97
50.0	24.99
60.0	24.49
69.5	23.53
75.5	22.16

Kremann, Gugl and Meingast, 1914

mol%	η (water ^t =1)
12°	
0.0	0.6030
25.0	0.9140
50.0	2.020
75.0	0.9987
100.0	1.0402
64°	
0.0	0.3419
25.0	1.0480
50.0	0.9130
75.0	0.9569
100.0	1.0014

Weissenberger, Schuster and Wojnoff, 1925

mol%	η (water=1)	σ
15°		
66.7	4.46	0.503
50	2.34	0.481
40	1.71	0.469
33.3	1.35	0.462
28.6	1.17	0.457
25	1.04	0.455
22.2	0.95	0.454

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
25°			
0	1.4942	63.3	1.5219
11.7	1.4990	73.3	1.5264
22.3	1.5032	81.5	1.5304
32.8	1.5082	91.5	1.5350
43.9	1.5131	100	1.5392
52.6	1.5172		

Trew and Spencer, 1936

mol%	n_D
28°	
0	1.49030
12.5	1.49663
16.1	1.49937
31.0	1.50620
41.5	1.51133
37.3	1.51430
57.6	1.51920
68.6	1.52441
77.6	1.52787
89.1	1.53329
100	1.53812

mol%	U	Q mix (cal/g)
at room temp.		
0	0.383	-
21.3	0.409	-1.68
33.6	0.425	2.02
56.9	0.436	2.05
72.7	0.441	1.45
87.1	0.456	0.30
100	0.515	-

Kremann, Meingast and Gugl, 1914

mol%	U	Q mix (cal/g)
16°		
53	0.436	+1.690

Toluene (C_7H_8) + p-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	8.55
50	11.9
40	13.6
33.3	14.3
28.6	14.7
25	15.0
22.2	15.2

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
40°			
0	1.4855	63.7	1.5143
11.5	1.4905	72.9	1.5195
22.8	1.4962	82.5	1.5236
33.5	1.5005	91.3	1.5273
43.3	1.5058	100	1.5218
54.2	1.5107		

Weissenberger, Schuster and Wojnoff, 1925

mol%	η	σ
(water = 1)		
15°		
66.7	3.47	0.495
50	2.02	0.477
40	1.53	0.465
33.3	1.23	0.458
28.6	1.07	0.454
25	0.96	0.452
22.2	0.87	0.451

Toluene (C_7H_8) + Resorcinol ($C_6H_6O_2$)

Bingham, 1907

C.S.T. = 134°

Francis, 1944

C.S.T. = 128°

Toluene (C_7H_8) + Guaiacol ($C_7H_8O_2$)

Pushin and Pinter, 1929

mol%	d	η
30°		
100	1.1236	4450
90	1.0994	3170
80	1.0757	2470
70	1.0454	1830
60	1.0158	1500
50	0.9961	1200
40	0.9687	981
30	0.9411	815
20	0.9119	700
10	0.8833	599
0	0.8547	526

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
30°			
0	1.4913	66.0	1.5205
13.0	1.4959	73.9	1.5248
26.7	1.5011	81.0	1.5298
38.5	1.5069	91.7	1.5344
58.2	1.5159	100	1.5386

Toluene (C_7H_8) + Thymol ($C_{10}H_{14}O$)

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
60°			
0	1.4740	68.7	1.4957
13.5	1.4780	77.3	1.4980
27.7	1.4831	84.9	1.5001
37.8	1.4863	91.8	1.5022
50.6	1.4903	100	1.5041
59.3	1.4932		

Toluene (C_7H_8) + o-Chlorphenol (C_6H_5OCl)

Pushin, Matavulj and Rikovski, 1948

%	n_D	%	n_D
25°			
0	1.4942	67.5	1.5313
14.4	1.5008	75.0	1.5370
26.8	1.5067	84.9	1.5440
37.6	1.5126	92.6	1.5503
48.3	1.5187	100	1.5566
58.3	1.5251		

Toluene (C_7H_8) + p-Chlorphenol (C_6H_5OCl)

Pushin, Matavulj and Rikovski, 1948

%	n_D	
	40°	45°
0	1.4855	1.4827
13.3	1.4932	1.4906
26.4	1.5013	1.4992
37.1	1.5092	1.5070
47.7	1.5168	1.5146
58.0	1.5248	1.5229
67.4	1.5323	1.5304
75.9	1.5396	1.5375
84.2	1.5455	1.5434
92.3	1.5524	1.5503
100	1.5593	1.5570

Toluene (C_7H_8) + o-Nitrophenol ($C_6H_5O_3N$)

Sidgwick, Spurrell and Davies, 1915

%	f.t.	%	f.t.
27.01	-0.6	81.98	+33.7
35.73	+6.9	85.88	35.8
43.06	12.5	90.48	38.5
52.77	18.5	93.21	40.1
59.15	22.3	97.87	43.3
66.84	26.1	100	44.9
74.53	30.0		

Toluene (C_7H_8) + m-Nitrophenol ($C_6H_5O_3N$)

Sidgwick, Spurrell and Davies, 1915

%	f.t.	%	f.t.
4.63	39.6	33.16	71.5
6.00	45.8	46.93	74.5
7.03	48.9	57.71	75.7
9.11	54.0	70.50	78.5
11.28	58.0	79.57	82.3
16.44	64.8	91.43	88.8
20.26	67.7	100	95.1

Toluene (C_7H_8) + p-Nitrophenol ($C_6H_5O_3N$)

Sidgwick, Spurrell and Davies, 1915

%	f.t.	%	f.t.
5.60	62.4	44.45	90.0
6.54	66.3	49.96	91.0
9.99	72.2	61.50	93.8
14.22	77.1	68.69	95.8
22.41	82.6	79.80	100.2
26.4	84.5	89.98	105.4
34.67	87.7	100	113.8

Ethylbenzene (C_8H_{10}) + Resorcinol ($C_6H_6O_2$)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T. = 151.5 dt/dp (5 - 65Kg) = -0.025

Propylbenzene (C_9H_{12}) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	159.3
14	158.5 Az
100	182.2

Cumene (C_9H_{12}) + Phenol (C_6H_6O)

Vilim, Hala and al. 1954 (fig.)

mol% (b.t.)	
L	V
50 mm	
0	0
5	45
25	74
50	82
75	91
100	100

Byk and Stroiteleva, 1956

V	%	L	b.t.
760 mm			
92.0		97.5	178.0
87.0		96.0	176.2
78.0		92.0	173.6
67.0		89.0	170.1
60.0		85.0	168.5
54.0		79.0	166.6
41.0		69.5	161.6
40.5		68.5	162.0
37.5		63.0	160.7
34.0		58.0	158.9
30.05		53.5	157.0
26.0		43.0	154.7
22.5		36.3	154.0
11.5		15.0	151.8
6.0		7.0	150.8

%	d	n _D
45°		
100	1.0550	1.5390
97	1.0490	1.5375
94	1.0424	1.5362
90	1.0299	1.5327
85	1.0077	1.5302
80	1.0060	1.5258
70	0.9825	1.5192
60	0.9599	1.5130
50	0.9389	1.5068
40	0.9200	1.5007
30	0.8964	1.4950
20	0.8770	1.4888
10	0.8404	1.4778

Butylbenzene ($C_{10}H_{14}$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	183.1
46	175.0 Az
100	182.2

m-Xylene (C_8H_{10}) + Phenol (C_6H_6O)

Philip and Haynes, 1905

%	d	e
20°		
0	0.8599	2.375
5.59	0.8701	2.576
12.40	0.8821	2.890
26.28	0.8938	3.201

m-Xylene (C_8H_{10}) + Resorcinol ($C_6H_6O_2$)

Campetti, 1913

%	f.t.	%	sat.t.
1.07	60.2	2.99	61.1
1.97	75.9	4.03	72.5
2.99	82.5	4.78	80.1
4.03	89.2	7.90	101.0
4.78	94.2	9.87	108.6
7.90	99.9	19.61	136.2
82.53	102.2	29.93	146.1
85.05	104.5	49.78	148.3
95.06	107.1	59.73	144.9
100	108.8	71.02	135.7
		81.33	106.0
		86.94	72.4
		89.79	35.0

m-Xylene (C_8H_{10}) + Methyl salicylate ($C_8H_8O_3$)

Chu and Kharbanda, 1954

b.t.	mol%	
	L	V
755 mm		
197	89.0	48.0
182	78.5	29.0
171	66.0	16.0
158	48.0	7.5
150	31.5	5.0
143	14.5	2.0

p-Xylene (C_8H_{10}) + Phenol (C_6H_6O)

Paterno and Montemartini, 1894

%	f.t.	%	f.t.
0	13.18	45.542	6.745
1.235	12.63	48.732	8.605
2.690	12.065	51.089	10.005
4.648	11.435	54.137	11.52
6.379	10.92	56.724	12.79
8.891	10.315	59.288	14.07
11.596	9.44	61.520	15.30
16.169	8.935	69.222	18.91
20.060	8.15	71.597	20.07
24.823	7.255	79.773	24.82
31.008	6.255	89.452	30.37
35.158	5.425	94.164	33.32
39.457	3.995	98.145	35.82
43.510	5.085	100	37.02
44.615	6.59		

Paterno, 1894

%	f.t.
0	13.445
1.137	12.895
2.690	12.33
4.647	11.70
6.378	11.185
8.891	10.58
11.588	10.005
16.134	9.20
20.060	8.415
25.401	7.52

Paterno and Ampola, 1897

%	f.t.	E
0.0	13.35	-
30.38	6.44	-
31.01	6.33	-
31.82	6.095	5.675
33.07	5.94	5.69
34.28	5.68	5.705
35.05	5.60	5.71
35.85	5.71	-
36.30	5.705	5.715
36.79	5.62	5.71
37.04	5.575	5.715
37.59	6.00	5.705
38.07	6.11	5.68
39.78	7.17	-
42.05	8.42	-
44.08	9.79	-
100.0	40.24	-

Paterno, 1896		
%	D f. t.	
80.2680	-12.57	
83.4221	10.42	
89.7143	6.57	
92.6202	4.76	
95.5174	2.95	
97.6148	1.57	
99.3633	0.45	
p-Xylene (C ₈ H ₁₀) + Thymol (C ₁₀ H ₁₄ O)		
Paterno and Montemartini, 1894		
%	f. t.	
0	13.23	
1.10	12.89	
2.05	12.615	
3.05	12.305	
5.29	11.70	
9.27	10.66	
13.29	9.61	
18.84	8.105	
28.20	5.595	
32.58	4.425	
p-Xylene (C ₈ H ₁₀) + Methyl salicylate (C ₈ H ₈ O ₃)		
Chu and Kharbanda, 1954		
b. t.	mol%	V
	L	
204	94.0	57.5
185	80.5	28.0
169	65.0	15.0
157	47.5	7.0
148	28.5	3.5
143	15.0	1.5
p-Cymene (C ₁₀ H ₁₄) + Phenol (C ₆ H ₆ O)		
Brauer, 1929		
%	mol%	b. t. (10mm)
100	100	73.5
50	58.7	56.8
30	37.8	55.8
10	13.6	56.2
0	0	56.9

Lecat, 1949		
%	b. t.	
0	176.7	
36	171.5	
100	182.2	
Az		
p-Cymene (C ₁₀ H ₁₄) + o-Chlorphenol (C ₆ H ₅ OCl)		
Lecat, 1949		
%	b. t.	
0	176.7	
50	172.2	
100	176.8	
Az		
Alkylbenzenes + Phenols		
Francis, 1944		
Systems	C.S.T.	
Diisopropylbenzene (C ₁₂ H ₁₈) + Salicylic alcohol (C ₇ H ₈ O ₂)	126	
Diisopropylbenzene (C ₁₂ H ₁₈) + Hydroquinone (C ₆ H ₆ O ₂)	above 237	
Diamylbenzene (C ₁₆ H ₂₆) + Pyrocatechol (C ₆ H ₆ O ₂)	above 144	
Diamylbenzene (C ₁₆ H ₂₆) + Hydroquinone (C ₆ H ₆ O ₂)	above 250	
Diamylbenzene (C ₁₆ H ₂₆) + Benzyl-p-hydroxybenzoate (C ₁₄ H ₂₀ O ₃)	99	
Diamylbenzene (C ₁₆ H ₂₆) + 2,4-Dinitrophenol (C ₆ H ₄ O ₅ N ₂)	151	
Methyldiethylbenzene (C ₁₁ H ₁₆) + Salicylic alcohol (C ₇ H ₈ O ₂)	86	
Methyldiisopropylbenzene (C ₁₃ H ₂₀) + Pyrocatechol (C ₆ H ₆ O ₂)	100	
Hexaethylbenzene (C ₁₈ H ₃₀) + Pyrocatechol (C ₆ H ₆ O ₂)	119	
Hexaethylbenzene (C ₁₈ H ₃₀) + Salicylic alcohol (C ₇ H ₈ O ₂)	154	
Pseudocumene (C ₉ H ₁₂) + Phenol (C ₆ H ₆ O)		
Lecat, 1949		
%	b. t.	
0	168.2	
25	166.4	
100	182.2	
Az		

Mesitylene (C_9H_{12}) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	164.6	Az
21	163.5	
100	182.2	

Triethylbenzene s. ($C_{12}H_{18}$) (b.t. = 215.5) + Phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
p-Ethyl phenol	$C_8H_{10}O$	218.8	40	212.0
Mesitol	$C_9H_{12}O$	220.5	30	213.0
Pyrocatechol	$C_6H_6O_2$	245.9	9	214.7
Guethol	$C_8H_{10}O_2$	216.5	30	214.5
p-Chlorphenol	C_6H_5OCl	219.75	20	214.7
o-Nitrophenol	$C_6H_5O_3N$	217.2	30	214.3

Francis, 1944

Aromatic hydrocarbons + Salicyl alcohol . ($C_7H_8O_2$)

1st comp.

C.S.T.

Ethylisopropylbenzene	($C_{11}H_{16}$)	107
Methyldiisopropylbenzene	($C_{13}H_{20}$)	142
Triethylbenzene	($C_{12}H_{18}$)	109
sec. Amylnaphthalene	($C_{15}H_{18}$)	80
Diisopropylnaphthalene	($C_{16}H_{20}$)	96

Lecat, 1949

Diphenyl ($C_{12}H_{10}$) (b.t. = 256.1) + Phenols

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Pyro-catechol	$C_6H_6O_2$	245.9	56.5	239.85
Resorcinol	$C_6H_6O_2$	281.4	21	252.35
Pyrogallol	$C_6H_6O_3$	309	10	253.5
Eugenol	$C_{10}H_{12}O_2$	254.8	50	253.5

Diphenyl ($C_{12}H_{10}$) + Resorcinol ($C_6H_6O_2$)

Francis, 1944

C.S.T. = 109°

Diphenyl ($C_{12}H_{10}$) + Trinitroresorcinol s.($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	E	min.
100	175.5	-	-
95	170.2	-	-
90	165.5	61.5	48
80	148.5	61.5	90
70	138.9	61.5	160
61.41	130.0	61.5	210
60	128.1	62.4	240
50	118.0	61.5	330
40	107.6	61.5	420
30	96.2	61.5	540
25	84.6	62.3	620
15	62.8	-	700
10	65.9	62.5	430
5	68.4	60.4	210
0	70.5	-	-

Diphenyl ($C_{12}H_{10}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E
100	122.4	-
95	114.6	-
90	108.6	52.2
80	98.5	"
70	88.3	53.3
60	77.3	54.1
50	66.7	"
40	55.1	52.8
35	55.0	-
30	54.1	56.9
20	52.9	60.6
10	50.9	65.4
5	68.1	-
0	70.5	-

p-p'-Ditolyl ($C_{14}H_{14}$) + p-p'-Diphenol ($C_{12}H_{10}O_2$)

Grimm, Gunther and Tittus, 1931 (fig.)

%	f.t.	m.t.
100	121	119
90	213	119
80	237.5	125
70	247	210
67	248	248 (2 + 1)
60	246.5	231
50	240	231
43.5	231.5	231
40	240	231
30	254	231.5
20	261.5	232
10	268	235
0	272.5	270

Diphenylmethane ($C_{13}H_{12}$) + Phenol (C_6H_6O)

Paterno and Ampola, 1897

%	f.t.	E	%	f.t.	E
0	24.45	-	34.36	12.35	11.24
0.47	24.16	-	35.94	11.87	11.295
1.23	23.705	-	36.65	11.69	11.50
2.02	23.23	-	37.07	11.585	11.295
3.59	22.47	-	37.53	11.26	11.325
5.37	21.73	-	38.68	11.52	-
8.08	20.72	-	39.16	10.01	11.30
14.24	18.40	-	40.94	10.51	11.235
18.07	17.20	-	41.33	11.94	11.49
20.73	16.49	-	41.77	11.05	11.235
23.40	15.35	-	43.43	12.94	-
27.20	14.54	-	43.44	11.93	11.20
31.56	13.24	11.30	44.86	12.87	-
32.46	12.75	11.45	47.21	14.07	-
32.80	12.34	11.38	48.99	15.44	-
33.46	12.68	11.27	51.08	16.73	34.88
34.20	12.28	11.46	-	-	-

Paterno, 1895

%	f.t.
0	24.58
0.46	24.29
1.22	23.835
2.02	23.36
3.59	22.60
5.36	21.86
8.09	20.85
14.24	18.295
16.70	17.095
20.72	16.385

Lecat, 1949

Diphenyl methane ($C_{13}H_{12}$) (b.t. = 265.4) + Phenols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
tert.Amyl phenol	$C_{11}H_{16}O$	266.5	40	263.0	-
Pyrocatechol	$C_6H_6O_2$	245.9	65	242.75	96 (65%)
Resorcinol	$C_6H_6O_2$	281.4	26	258.75	113 (26%)
Pyrogallol	$C_6H_6O_3$	309	11	263.5	-

Diphenyl methane ($C_{13}H_{12}$) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	23.9	-	55.0	90.3	-
2.6	40.3	23.1	59.9	91.8	-
5.2	56.0	-	60.1	91.2	23.2
7.7	63.0	-	62.6	93.2	-
11.3	69.0	-	62.7	92.1	-
15.8	74.1	23.1	65.1	92.5	-
20.9	78.8	-	70.9	93.9	23.2
26.6	82.1	-	77.1	95.2	-
32.0	84.0	23.1	88.3	97.8	-
36.7	85.9	-	91.9	98.8	23.2
40.9	87.0	-	96.3	100.4	-
43.8	87.6	-	100	101.8	-
49.3	89.2	23.1			

Diphenyl methane ($C_{13}H_{12}$) + Resorcinol ($C_6H_6O_2$)

Kremann and Fritsch, 1920

%	f.t.	Sat.t.	%	f.t.	Sat.t.
0	23.9	-	53.8	101.6	114.0
0.7	27.8	-	54	101.6	114.1
3.0	53.3	-	58.9	101.8	112.1
4.8	75.6	-	61.5	101.5	111.0
4.8	78.5	-	62.0	101.8	110.0
6.6	85.0	-	64.3	101.6	109.3
8.7	90.8	-	64.5	101.8	109.0
8.8	92.5	-	64.8	101.6	108.4
12.2	96.5	-	66.8	101.6	107.3
12.7	98.4	-	68.4	101.8	105.8
18.9	100.9	106.5	70.3	101.6	104.5
19.5	100.1	106.3	73.2	101.6	-
22.7	100.8	109.5	75.5	101.8	-
26.9	100.5	112.1	77.5	102.5	-
31.1	101.4	114.2	81.7	103.2	-
36.6	101.6	115.1	86.4	104.3	-
41.3	101.5	115.4	89.7	105.4	-
42.3	101.4	115.4	96.5	107.5	-
49.7	101.4	115.0	100	108.8	-

Diphenyl methane ($C_{13}H_{12}$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	23.9	-	62.4	162.0	-
0.8	62.4	23.9	63.7	162.0	-
1.2	92.3	-	68.4	162.1	-
1.6	101.8	23.9	70.7	162.1	-
2.8	117.4	23.9	73.4	162.5	24.0
4.7	126.8	-	75.5	162.5	23.9
8	140	-	78.2	163.0	-
11.6	149	23.9	81.3	163.7	-
15.9	154	-	86.7	165.2	23.9
22.6	158.6	-	86.9	165.2	23.9
28.1	160.5	-	93.6	167.0	-
34	161.0	-	95	167.4	-
40.5	161.8	-	96.5	166.0	-
48.2	162.0	23.9	98.4	168.6	23.9
54.7	162.0	-	100	168.8	-
58.6	162.0	23.9			

Diphenyl methane ($C_{13}H_{12}$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Fritsch, 1920

%	f.t.	Sat.t.	E
0	23.9	-	-
1.3	75.6	-	23.4
1.7	71.0	-	-
2.6	93.4	-	-
4.2	105.4	-	-
5	106.9	-	-
7.8	113.9	-	-
10	115.2	116.5	-
11.2	115.0	-	23.4
20	115.2	120.2	-
22.2	115.2	-	23.5
30	115.0	121.9	-
40	115.2	122.8	-
50	115.3	122.9	-
60	115.2	-	-
65	115.6	122.5	23.5
70	115.5	121.1	-
80	115.0	119.2	23.5
90	115.5	-	-
95	117.5	-	-
100	126.0	-	-

Diphenyl methane ($C_{13}H_{12}$) + Isoeugenol ($C_{10}H_{12}O_2$)

Lecat, 1949

%	b.t.
0	265.4
20	264.7 Az
100	268.8

Diphenyl methane ($C_{13}H_{12}$) + 1-Naphthol ($C_{10}H_8O$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	23.9	-	55.7	71.2	19.6
4.6	21.5	-	62.6	75.3	-
10.4	26	19.6	62.8	75.0	19.6
15.8	34.2	19.6	69.3	78.4	-
19.3	39.0	-	67.6	78.0	-
21.3	42.0	-	72.9	80.5	19.6
24.7	46.0	19.6	76.4	82.2	-
28.0	48.4	-	81.2	83.8	-
33.0	54.0	-	84.6	85.4	19.6
36.1	57.2	-	90.6	88.2	-
39.9	61.1	-	96.1	91.3	19.3
48.8	67.1	-	100	93.1	-

Diphenyl methane ($C_{13}H_{12}$) + 2-Naphthol ($C_{10}H_8O$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	23.8	-	61.4	99.7	-
4.5	25.5	22.6	63.4	100.5	-
15	61.0	22.6	65.2	101.7	-
18.9	67.0	22.6	67	102.0	-
22.0	72.5	22.6	71.5	104.5	-
27.6	78.1	-	74.3	105.5	-
38.2	87.0	-	78.8	108.0	-
43.9	91.3	-	80.8	108.9	-
47.1	98.5	-	85.7	112.0	-
50.4	94.4	-	92.9	117.0	-
59.1	99.0	22.6	100	122.0	-

Diphenyl methane ($C_{13}H_{12}$) + m-Nitrophenol($C_6H_5O_3N$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	24.0	22.0	54.2	80.8	-
12.1	58.0	22.0	57.3	81.8	-
14.2	62.0	"	60.0	82.5	-
17.6	64.5	-	61.5	82.8	21.5
20.8	67.5	22.0	64.5	83.8	-
24.5	70.5	-	65.5	83.5	-
29.2	73.0	-	73.5	86.0	-
33.1	74.5	-	80.0	87.5	-
37.9	75.5	-	87.0	90.2	-
40.6	76.6	21.5	92.6	91.8	-
44.1	78.6	-	96.5	92.8	-
47.6	79.5	-	100	94.8	-
51.7	80.6	-			

Diphenyl methane ($C_{13}H_{12}$) + p-Nitrophenol($C_6H_5O_3N$)

Kremann and Fritsch, 1920

%	f.t.	E	%	f.t.	E
0	23.9	-	67.7	99.0	23
6.7	61.01	23.1	70.6	99.6	22.9
13.5	72.2	-	71.4	100.0	-
23.9	82.0	23	73.4	100.2	-
31.9	87.6	-	76.5	101.2	-
40.7	90.7	-	81.2	102.6	22.9
49.9	93.9	23	86.1	103.9	-
57.8	96.2	-	91.0	106.7	-
63.0	97.8	-	95.6	108.4	22.9
65.8	98.1	-	100	111.6	-

Diphenyl methane ($C_{13}H_{12}$) + Picric acid($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	%	f.t.	E
0	26.6	-	60	90.8	23.9
2.5	26.1	-	65	90.8	23.9
5	25.4	22.7	70	91.0	23.9
10	24.5	-	75	91.1	23.8
15	32.7	23.8	80	96.7	23.3
20	43.9	23.9	85	102.9	23.0
30	63.3	23.8	90	108.0	22.2
40	78.8	23.8	95	114.2	-
45	84.4	23.9	97	114.2	-
50	89.6	23.9	100	122.4	-
55	90.7	23.9			

Kremann and Fritsch, 1920

%	f. t.	E	%	f. t.	E
0	24.0	-	61.0	97.0	22.5
6.9	22.3	22.3	61.3	96.8	-
16.9	53.6	-	62.9	96.9	22.3
24.1	68.5	-	64.8	98.2	-
29.4	75.5	-	66.6	99.5	22.5
34.9	80.5	22.3	66.8	98.8	-
38.7	83.8	-	71.8	101.6	-
41.6	85.2	-	75.8	103.1	22.5
44.3	87.4	-	79.7	105.4	-
47.8	89.3	-	84.2	108.0	22.5
51.2	91.8	-	88.2	110.3	-
53.9	92.6	22.3	91.9	112.6	22.5
57.9	94.5	-	100	121.5	-

Diphenyl methane ($C_{12}H_{10}$) + Trinitroresorcinol s.
($C_6H_3O_6N_3$)

Efremov, 1916

%	f. t.	E	min..
0	26.6	-	-
4.5	22.7	-	760
5	40.6	22.6	640
10	64.8	22.6	570
20	99.2	22.6	500
30	121.8	22.6	410
35	132.2	22.6	380
40	140.8	22.6	330
45	144.3	22.6	310
50	144.6	22.6	280
55	144.6	22.5	240
60	145.1	22.5	210
65	148.9	22.6	190
70	152.7	22.6	160
75	155.0	22.5	130
80	157.9	21.3	100
90	163.4	18.7	-
95	169.2	-	-
97	172.4	-	-
100	175.5	-	-

Triphenyl methane ($C_{19}H_{16}$) + Phenol (C_6H_6O)

Kremann, Odelga and Zawodsky, 1921

%	f. t.	%	f. t.
0	91.0	51.5	59.8
4.2	86.2	55.9	51.3
7.4	89.0	59.8	48.9
12.3	78.0	62.9	45.8
16.4	74.8	65.1	43.4
18.6	73.2	68.0	41.0
22.1	71.0	71.6	35.0
25.2	69.0	75.1	32.5
28.3	67.0	77.8	33.0
32.5	65.0	80.4	34.5
35.9	63.2	85.2	36.7
38.9	61.7	89.4	38.0
40.7	60.0	93.4	38.5
42.8	59.7	96.2	39.8
46.8	56.5	100	41.0

Triphenyl methane ($C_{19}H_{16}$) + Pyrocatechol
($C_6H_6O_2$)

Kremann, Odelga and Zawodsky, 1921

%	f. t.	%	f. t.
0	91.0	54.6	94.8
1.3	88.8	56.4	94.7
3.6	86.5	57.4	95.0
8.3	85.0	59.2	95.3
12.5	84.0	63.7	95.5
16.4	82.5	68.2	96.1
20.9	85.7	72.0	96.8
24.3	87.8	76.6	97.5
29.1	89.1	79.8	98.0
32.1	90.1	83.4	98.5
35.5	91.2	87.5	99.5
38.9	91.9	91.2	100.5
41.2	92.5	96.1	101.8
47.1	93.5	100	102.8
51.2	94.0		

Triphenyl methane ($C_{19}H_{16}$) + Hydroquinone
($C_6H_6O_2$)

Kremann, Odelga and Zawodsky, 1921

%	f. t.	Sat. t.	%	f. t.	Sat. t.
0	91.0	-	44.9	160.0	177.0
2.6	128.0	-	50.5	160.0	177.0
5.7	146.0	-	55.1	160.0	176.0
8.8	154.0	-	59.5	160.0	175.0
12.3	160.0	-	63.7	160.0	173.0
16.0	160.0	164.0	67.7	160.0	171.0
20.4	160.0	-	72.1	160.0	167.5
24.1	160.0	170.0	76.7	160.0	163.0
27.3	160.0	173.0	83.2	161.0	-
29.9	160.0	175.0	88.6	164.0	-
33.8	160.0	176.0	95.4	167.0	-
39.9	160.0	177.0	100	168.5	-

Triphenyl methane ($C_{19}H_{16}$) + Resorcinol
($C_6H_6O_2$)

Kremann, Odelga and Zawodsky, 1921

%	f.t.	sat.t.
0	91.0	-
3.9	89.0	-
8.2	102.0	-
10.4	106.0	-
15.7	106.0	129.0
19.6	106.0	134.0
27.7	105.5	138.0
38.1	106.0	142.0
45.2	106.0	143.0
49.3	107.0	142.5
52.1	106.0	142.0
55.1	106.0	142.0
59.7	106.0	141.5
63.0	106.0	141.0
66.7	106.0	138.0
72.1	105.5	135.0
77.6	106.0	128.0
81.6	106.0	120.0
84.7	106.0	112.0
87.7	106.5	-
90	107.0	-
92.3	107.5	-
96.1	108.5	-
100	109.0	-

E = 87.5°

Triphenyl methane ($C_{19}H_{16}$) + Pyrogallol
($C_6H_6O_3$)

Kremann, Odelga and Zawodsky, 1921

%	f.t.	Sat.t.
0	91.0	-
4.0	98.0	-
10.0	122.0	-
16.3	124 - 125	155.0
51.6	"	178.5
57.8	"	176.0
64.2	"	173.0
71.8	"	164.0
95	"	-
96.4	125.0	-
98.2	125.5	-
100	126	-

Triphenyl methane ($C_{19}H_{16}$) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann, Odelga and Zawodsky, 1921

%	f.t.	%	f.t.
0	91.0	57.3	46.8
5.9	86.0	62.9	43.0
14.7	80.0	67.6	38.0
20.8	75.5	72.6	37.0
27.5	69.5	77.0	38.5
32.3	66.5	83.0	40.5
37.6	62.0	87.7	40.8
40.9	59.0	92.4	43.2
45.0	56.0	96.5	44.0
50.2	51.8	100	45.0

E : 35.5° - 36.0°

Triphenyl methane ($C_{19}H_{16}$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann, Odelga and Zawodsky, 1921

%	f.t.	%	f.t.
0	91.0	50	85.9
1.6	89.8	56.1	86.8
4.8	88.0	60.4	87.0
9.6	86.5	65.2	87.0
14.3	84.5	59.3	88.0
20.4	81.0	74.8	88.3
26.3	80.5	80.9	90.0
30.9	81.5	86.4	90.8
35.5	83.2	91.8	93.0
40.2	84.2	96.9	95.0
44.2	84.8	100	96.0

E : 78° - 80°

Triphenyl methane ($C_{19}H_{16}$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann, Mauermann and al., 1923

%	f.t.	E	%	f.t.	E
0	90.8	-	57.46	96.5	80.5
5.88	86.5	-	63.82	99	80.5
11.70	89.5	-	71.56	101	-
14.23	81.5	-	76.50	103	-
17.73	83	80.5	80.90	105	-
25.65	85.5	80.5	85.61	106	-
34.0	88.5	80.5	89.39	108	-
39.53	90	80.5	96.53	110.5	-
48.80	93	80.5	100	111.5	-

Triphenyl methane ($C_{19}H_{16}$) + Trinitroresorcinol
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E	min.
0	92.2	-	-
5	91.4	-	500
10	113.3	91.2	420
20	138.9	92.0	360
30	149.5	91.2	310
40	159.8	91.2	280
45	162.8	91.2	260
50	165.7	91.2	210
55	167.3	91.2	190
60	167.3	90.5	140
70	167.4	88.0	120
80	167.4	85.2	70
85	167.4	83.3	36
90	170.2	80.8	-
95	172.8	-	-
100	175.5	-	-

Triphenyl methane ($C_{19}H_{16}$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	Sat. t.
0	92.0	-	-
2.5	90.4	-	-
5	88.8	80.7	-
10	85.9	81.5	-
15	96.5	-	-
20	104.0	82.8	-
25	108.5	82.3	-
30	111.0	82.0	116.5
35	111.9	82.3	128.3
40	112.3	82.1	134.5
50	113.5	81.5	139.1
60	112.8	82.5	140.3
70	113.1	82.3	140.1
75	112.7	82.3	138.1
80	113.0	82.3	133.7
85	112.6	82.3	127.3
88	113.5	82.3	119.2
90	112.6	80.1	-
95	117.1	78.7	-
97	119.2	-	-
100	122.4	-	-

Kremann, Odelga and Zawodsky, 1921

%	f. t.	Sat. t.	%	f. t.	Sat. t.
0	39.2	-	67.6	114.0	144
15.4	86.5	-	69.9	113.7	143
20.7	106.0	-	71.8	113.9	142
29.3	113.4	118	75.2	114.0	140
37.6	113.5	132	78.8	114.0	136
42.5	113.8	136	83.6	113.8	131
48.9	113.6	140	93.7	116.0	-
54.0	113.6	143	97.8	119.6	-
57.9	114.0	143.5	100	121.5	-
62.8	113.8	144			
64.7	113.9	144	87.7	114.2	122

Rheinboldt and Kircheisen, 1926

%	f. t.	E	Sat. t.
0	92.0	91.0	-
3.9	90.5	86.0	-
10.3	92.0	86.0	-
14.8	101.5	86.0	-
19.8	109.0	86.0	-
25.1	114.0	86.0	-
30.2	113.5	86.5	-
35.3	114.0	86.6	123.0
39.4	114.0	86.5	130.0
49.6	113.5	86.5	141.0
59.7	114.0	86.0	144.5
69.6	114.0	86.5	143.0
79.4	115.0	87.0	134.0
84.6	115.0	87.0	-
93.9	114.5	87.0	-
100	122.5	121.5	-

Triphenyl methane ($C_{19}H_{16}$) + l-Naphtol
($C_{10}H_8O$)

Kremann, Odelga and Zawodsky, 1921

%	f. t.	E	%	f. t.	E
0	91.0	-	43.8	71.0	61
3.9	88.2	-	46.3	72.0	-
6.2	85.2	-	49.5	73.5	61
9.6	82.5	-	50.4	74.4	-
12.8	80.0	-	53.2	75.6	-
15.7	77.2	-	60.6	78.2	-
18.3	74.8	-	66.9	81.0	-
20.6	73.0	-	74.3	84.6	-
23.3	71.0	-	83.9	87.9	-
26.7	67.5	63	88	89.4	-
32.3	64.8	-	95	91.2	-
36.1	67.0	63	100	93.0	-
38.9	68.8	61			

Triphenyl methane ($C_{19}H_{16}$) + 2-Naphtol ($C_{10}H_8O$)

Kremann, Odelga and Zawodsky, 1921

%	f.t.	%	f.t.
0	91.0	53.6	99.0
2.2	88.6	56.7	100.8
4.8	86.6	60.6	102.5
7.7	85.0	61.7	102.8
11.5	82.5	65.4	104.2
14.8	81.0	68.8	105.8
17.8	79.0	72.3	107.0
20.6	71.0	76.2	108.5
24.3	80.0	84.7	112.0
28.0	84.0	87.8	113.5
35.3	88.0	93.2	116.5
40.8	94.0	97	119.0
46.8	96.0	100	121.0
50.1	97.8		

E : 77.0°

Dibenzyl ($C_{14}H_{14}$) + Resorcinol ($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	284.5
43	269.5 Az
100	281.4

C.S.T. = 125

Francis, 1944

Dibenzyl ($C_{14}H_{14}$) + Hydroquinone ($C_6H_6O_2$)

Francis, 1944

C.S.T. = 171

Dibenzyl $C_{14}H_{14}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	%	f.t.	E
100	122.4	-	30	65.8	46.7
95	116.1	44.6	25	58.7	46.7
90	112.2	44.5	20	49.2	47.1
80	103.2	46.0	15	48.2	46.7
70	96.2	46.0	10	49.7	47.1
60	89.3	46.7	5	50.9	47.1
50	82.0	46.0	0	51.8	47.1
40	74.1	46.7			

Dibenzyl ($C_{14}H_{14}$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	E	min. .
100	175.5	-	-
95	172.0	-	-
90	167.7	48.9	48
80	158.9	50.7	140
70	162.3	50.7	240
63	148.2	50.7	280
59	145.7	50.7	330
50	145.7	50.7	380
40	128.4	50.7	480
30	121.8	50.7	600
20	107.8	50.7	700
15	92.6	50.7	700
10	66.8	50.6	840
5	51.0	-	760
0	51.8	-	-

1-Methylstyrene ($C_{10}H_{10}$) + Phenol (C_6H_6O)

Shcherbak, Bik and Aerov, 1955

L	%	V	p	b.t.
0	0	768.0		163.7
15.5	13.0	754.5		162.2
27.0	20.0	748.3		162.7
31.2	24.5	746.3		163.8
40.5	30.5	748.2		164.2
49.0	38.0	748.18		165.3
57.5	42.5	747.7		166.5
60.5	43.5	752.15		166.1
68.0	50.0	752.20		167.3
73.0	57.5	747.70		168.5
76.0	61.0	751.70		170.4
77.0	72.5	746.74		170.0
82.0	73.5	750.20		173.1
92.5	83.5	753.30		176.3
100	100	747.0		181.5

%	d	n_D	%	d	n_D
45°					
0	0.8870	1.5210	76	1.0081	1.5345
10	0.9014	1.5228	80	1.0170	1.5350
20	0.9165	1.5248	82	1.0203	1.5357
30	0.9340	1.5261	84	1.0249	1.5360
40	0.9475	1.5280	86	1.028	1.5364
50	0.9642	1.5300	90	1.0356	1.5370
60	0.9809	1.5317	92	1.0387	1.5374
64	0.9883	1.5324	94	1.0428	1.5378
67	0.9931	1.5331	96	1.0465	1.5383
70	0.9991	1.5335	98	1.0500	1.5386
73	1.0045	1.5340	100	1.0550	1.5390

Stilbene ($C_{14}H_{12}$) + Resorcinol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.	
0	306.5	Az
56	277.5	
100	281.4	

Stilbene ($C_{14}H_{12}$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E	%	f. t.	E
100	175.5	-	52.5	141.3	114.6
97	171.3	-	50	139.8	114.6
95	168.7	-	45	135.7	114.6
90	162.2	140.7	40	131.2	114.6
85	157.2	141.8	30	123.0	114.6
80	152.8	141.9	25	118.9	114.6
70	149.0	142.4	20	115.5	-
64.3	146.9	142.4	15	116.2	114.3
60	145.3	142.4	10	118.0	114.3
57.5	143.8	142.4	5	120.1	-
55.0	142.4	114.5	0	122.5	-

(1+1)

Stilbene ($C_{14}H_{12}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	min.
100	122.4	-	-
95	117.8	87.6	36
90	112.6	90.0	72
85	108.5	90.2	120
80	104.3	90.2	170
70	95.6	90.2	310
65	91.3	-	430
62.5	91.6	90.2	540
60	92.4	-	500
57.5	92.8	92.8	470
55	93.1	92.8	400
52.5	96.8	92.8	360
50	99.2	92.8	300
45	102.9	92.8	210
40	104.7	92.8	170
30	109.2	92.8	70
20	114.4	90.2	15
15	116.5	-	-
10	118.8	-	-
5	120.4	-	-
0	122.2	-	-

(1+1)

Naphthalene ($C_{10}H_8$) + Phenol (C_6H_6O)

Saunier, 1948 and 1950 (fig.)

%	dew. p.	b. t.
0	218.0	218.0
10	213.2	204.4
20	208.0	196.0
30	203.6	190.6
40	199.4	188.0
50	195.0	185.8
60	190.8	184.0
70	187.6	182.6
80	184.0	182.0
90	182.0	181.6
100	180.2	180.2

Yamamoto, 1908 (fig.)

%	f. t.	%	f. t.
0	79.95	71.76	39.26
4.80	76.81	72.13	38.42
10.98	73.33	73.61	45.51
18.82	69.70	74.4	36.39
28.44	65.43	77.29	32.60
36.12	61.94	79.52	29.61
46.24	57.16	-	28.60 E
51.91	53.93	-	29.80
56.60	51.19	82.16	30.97
61.95	47.92	86.92	33.42
69.03	42.60	92.63	36.39
		100	40.39

Hirobe, 1908

%	f. t.	%	f. t.
0.0	79.87	70.12	40.20
12.04	72.87	76.17	34.59
22.28	67.98	78.72	29.60
32.17	63.58	-	29.27 E
42.13	59.11	-	29.42
49.38	54.64	80.36	30.05
56.49	51.01	84.44	32.26
64.32	45.59	91.48	35.79
		100	40.29

Hatcher and Skirrow, 1917

%	f. t.	%	f. t.
100	39.4	61.1	51.6
93.3	35.1	49.8	58.0
86.5	30.2	31.7	66.2
83.8	28.7	19.1	70.9
80.0	35.4	10.6	74.4
75.5	39.3	0	79.4
70.0	45.6		

Mortimer, 1923

%	f. t.	%	f. t.
100	40.5	40	63.4
90	33.4	30	67.3
84	29.8 E	20	71.3
70	46.7	10	75.3
60	53.7	0	80.1
50	58.8		

Migliacci and Gargiulo, 1927

%	f. t.	E	min.
100	43.0	-	-
90	35.4	28.5	580
85	33.1	29.1	880
80	39.0	29.0	1200
70	39.2	28.9	990
60	47.8	28.8	800
50	54.9	29.1	630
40	61.5	28.7	440
30	66.3	28.3	310
20	71.5	28.5	200
10	75.9	28.6	80
0	80.0	-	-

Bernouilli and Veillon, 1932

%	f. t.
100	41.0
90	34.1
80	30.2
70	41.0
50	53.4
20	67.8
0	79.4

Mameli and Mannessier-Mameli, 1933

mol%	f. t.
0	79.6
84	29.5 E
100	42.5

Shishokin and Muskina, 1938

mol%	f. t.	mol%	f. t.
0	80	48.94	59.6
10.41	75	61.89	52.5
19.43	71.2	69.63	46.8
30.27	67.2	79.59	36.7
39.36	63.7	89.46	33.6

Bernouilli and Veillon, 1932

%	d	
	97.5°	77.0°
100	1.0073	1.0260
90	0.9973	1.0215
90	-	1.0190
80	0.9946	1.0170
80	-	1.0140
70	0.9897	1.0125
70	-	1.0097
60	0.9864	1.0075
50	0.9830	1.0030
40	0.9789	0.9983
30	0.9755	0.9935
20	0.9709	0.9900
10	0.9681	0.9846
0	0.9645	-

%	η	
	97.5°	77.0°
100	768.7	1122.2
90	726.5	1053.7
85	-	1021.2
80	693.7	985.8
75	-	957.0
70	659.7	923.7
65	-	900.1
60	633.0	874.0
50	608.9	824.1
40	585.8	789.2
30	566.8	762.2
20	549.7	736.4
10	543.3	727.3
0	541.2	-

Naphthalene ($C_{10}H_8$) + o-Cresol (C_7H_8O)

Rhodes and Hance, 1921

%	f. t.	
	stable	metast.
100	30.4	-
99.5	30.2	-
99	29.9	-
98	29.4	-
97	29.0	-
96	28.45	-
95	28.2	-
90	25.9	-
85	23.6	-
80	21.9	5.0
79	21.8	15.94
78	20.8	17.34
77	21.3	19.1
76.5	21.8	-
75	24.3	-
70	32.3	-
60	43.3	-
50	50.1	-
25	65.65	-
10	74.56	-
0	80.2	-

Naphthalene ($C_{10}H_8$) + m-Cresol (C_7H_8O)

Piatti, 1932

%	η	
	(degrees Engler)	
100	20°	2.7
90		2.0
80		1.8

Naphthalene ($C_{10}H_8$) + p-Cresol (C_7H_8O)

Saunier, 1948 and 1950 (fig.)

%	dew. p.	
	b. t.	
0	218	218
10	214.7	212.4
20	211.8	208.8
30	209.2	206.0
40	207.0	204.5
50	205.0	203.5
60	203.8	203.0
70	203.0	202.3
80	202.3	202.0
90	202.0	201.9
100	201.9	-

Naphthalene ($C_{10}H_8$) + (m + p) Cresol (C_7H_8O)

Markowska-Majewska, 1955 (fig.)

%	b. t.	
	begin	end
0	202.0	202
10	201.8	202
20	201.8	202
40	202.5	204
60	205.5	207
80	209.5	210.5
90	213.5	214
100	215.5	215.5

Naphthalene ($C_{10}H_8$) (b. t. = 218.0) + Phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
m-Cresol	C_7H_8O	202.2	97.5	202.18
p-Ethyl-phenol	$C_8H_{10}O$	218.8	45	215.0
o-Xylenol	$C_8H_{10}O$	228.8	16	217.6
Mesitylrol	$C_9H_{12}O$	220.5	37	215.5

Naphthalene ($C_{10}H_8$) + Thymol ($C_{10}H_{14}O$)

Roloff, 1895

%	f. t.	%	f. t.
0	79.5	72.8	32.3
6.6	77.0	74.0	33.2
16.6	72.4	74.1	34.1
23.7	68.6	75.3	34.0
32.4	64.0	76.7	34.4
38	60.9	77.8	34.9
44.9	56.8	78.6	36.2
49.1	53.8	83	38.7
53.8	50.6	88.5	42.5
55.3	49.4	89.0	42.6
66.9	35.7	92.4	44.7
67.3	36.5	94.4	45.6
69.8	32.7	96.4	47.3
70.9	31.8	100	49.2
71.3	30.0		

Sorum and Durand, 1952

%	f. t.	
0	80.1	
-	32.1 E	
100	49.2	

Bernoulli and Veillon, 1932	
%	f. t.
100	49.2
80	36.9
70	31.1
60	43.1
50	51.0
40	57.6
20	69.7
0	79.4
Bugnet, 1909	
Eutectic	
Bernoulli and Veillon, 1932	
%	d
	97.5° 77.0°
100	0.9118 0.9288
90	0.9164 0.9340
80	0.9220 0.9395
80	0.9225 0.9418
70	0.9273 0.9450
70	0.9295 0.9469
60	0.9320 0.9500
60	0.9352 0.9528
50	0.9380 0.9555
40	0.9431 0.9605
30	0.9484 0.9660
20	0.9537 0.9715
10	0.9590 0.9770
0	0.9645 -
%	η
	97.5° 77°
100	791.8 1198.9
90	732.1 1096.6
80	688.5 1015.4
75	- 980.0
70	651.6 940.5
65	- 906.1
60	627.5 864.3
55	- 848.5
50	597.7 827.2
40	583.3 784.2
30	748.6 563.8
20	549.1 725.2
10	544.5 714.1
0	541.2 -

Naphthalene (C ₁₀ H ₈) + Pyrocatechol (C ₆ H ₆ O ₂)					
Lecat, 1949					
%	b. t.				
0	218.0				
11.5	217.4 Az				
100	245.9				
Kremann and Janetzky, 1912					
%	f. t.	%	f. t.		
0	80.0	46.5	83.5		
4.2	78.0	51.4	84.5		
17.2	73.0	55.5	85.0		
23.2	76.0	65.6	88.0		
30	80.0	72.7	91.5		
32.7	81.5	82.2	95.5		
36.3	82.0	89.4	97.5		
38.5	83.0	100	104.0		
42.9	83.0				
E ₁ : 22.2%	72°	(1+1)			
E ₂ : 64.8%	72°				
Rheinboldt, 1925					
%	f. t.	E	%	f. t.	E
100	104.5	104.0	43.0	85.0	72.0
89.9	100.0	73.0	37.4	83.0	73.0
81.4	97.0	72.0	30.6	82.0	72.0
73.5	93.0	73.0	27.3	79.0	73.0
69.8	93.0	72.5	21.9	76.0	73.0
66.7	90.0	73.0	20.6	76.5	72.0
59.5	90.0	72.0	9.2	76.0	73.0
50.7	86.0	73.0	0	80.0	79.0
49.8	88.0	72.5			
Naphthalene (C ₁₀ H ₈) + Hydroquinone (C ₆ H ₆ O ₂)					
Kremann and Janetzky, 1912					
%	f. t.	E	min.		
100	172	-	-		
90	159	78.5	1		
80	156	78.0	3		
60	155	79.0	5		
50	154.2	79.0	6.5		
34.0	153.0	79.0	8		
20	150	-	-		
10	139	79.0	11		
8.0	130	-	-		
3.3	110	-	-		
1.3	88	-	-		
0	80	-	-		

Naphthalene ($C_{10}H_8$) + Resorcinol ($C_6H_6O_2$)

Vignon, 1891

mol%	f. t.
0	80
33.33	97
50	98
66	101
100	110

Kremann and Janetzky, 1912

%	f. t.	%	f. t.
100	110.0	50.2	97.0
92.9	105.5	29.4	96.0
88.1	102.0	22.5	95.0
81.7	100.5	10.9	90.0
75.1	98.0	8.0	86.0
68.5	97.0	3.1	74.5
56.9	97.0	0	80.0

%	f. t.	E	%	f. t.	E
80	101.0	76.0	40	97.0	76.0
86.5	101.5	76.0	25	95.0	-
80.8	100.0	-	18.8	94.0	76.0
73.9	97.5	-	13.8	91.0	-
63.4	97.0	-	10.7	89.0	-
54.8	97.0	-	6.3	82.0	-
60	97.2	76.0	6.7	-	76.5
50	97.0	-			

Francis, 1944

C.S.T. = 98°

Naphthalene ($C_{10}H_8$) + Guethol ($C_8H_{10}O_2$)

Lecat, 1949

%	b. t.
0	218.0
72	215.5
100	216.5

Az

Naphthalene ($C_{10}H_8$) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol%	f. t.	E	min.
100	28	-	-
90	23	17	-
88	21.7	18	1.9
85	20.2	18	2.3
80	18.3	18	3.8
70	35	16	2
60	44	9.9	1.7
50	-	9	1.2
40	52	7	1.1
30	58	14	-
20	63	-	-
10	75	-	-
0	80	-	-

Bugnet, 1909

Eutectic

Naphthalene ($C_{10}H_8$) + Salicylaldehyde ($C_7H_6O_2$)

Auwers, 1899

%	D f. t.
0.99	-0.60
4.96	2.75
14.09	7.35
26.65	13.36
35.96	18.06
43.57	22.30
50.69	26.64

Naphthalene ($C_{10}H_8$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Auwers, 1899

%	D f. t.
0.74	-0.40
4.20	1.78
9.61	3.30
15.63	4.59
20.12	5.43
25.22	6.36

Naphthalene (C ₁₀ H ₈) + p-Oxybenzaldehyde (C ₇ H ₆ O ₂)					
Auwers, 1899					
%		D f. t.			
1.31		-0.58			
4.84		1.53			
9.18		2.20			
13.06		2.82			
16.76		3.27			
Naphthalene (C ₁₀ H ₈) + Methyl salicylate (C ₈ H ₈ O ₃)					
Auwers, 1899					
%		D f. t.			
1.63		-0.76			
10.63		5.11			
18.78		9.32			
25.13		12.81			
30.26		15.80			
35.66		19.13			
40.00		21.95			
44.25		24.87			
47.60		27.40			
Naphthalene (C ₁₀ H ₈) + Salol (C ₁₃ H ₁₀ O ₃)					
Majumdar and Rakshit, 1955					
%	f. t.	E	%	f. t.	E
100	42.0	42.0	65	42.26	-
95	37.09	-	58.4	49.11	25.40
90	33.1	-	50	55.38	-
85	28.59	25.49	40	61.66	-
82	-	25.49	30	67.94	-
80	-	25.49	20	71.3	-
78 E	25.49	25.49	10	76.59	-
74	30.2	25.49	0	80.05	-
72	32.2	-			
Bugnet, 1909					
Eutectic					
Angeletti, 1928					
E : 78.8% 24.5°					

Naphthalene (C ₁₀ H ₈) + 1-Naphthol (C ₁₀ H ₈ O)							
Vignon, 1891							
mol%		f. t.					
0		80					
33.33		66					
50		60					
66.67		71					
100		92					
Crompton and Whiteley, 1895							
%		f. t.		%		f. t.	
0		79.8		40		62.2	
10		74.8		50		69.6	
20		71.2		60		74.5	
30		65.7		70		80.8	
35		64.4		81.8		87.5	
38.9		61.7		90		92.5	
				100		95.5	
Kofler and Brandstätter, 1943							
%		f. t.		%		f. t.	
0		81		60		76	
10		78		70		82	
20		74		80		88	
30		69		90		93	
40		63		100		96	
50		68					
Kofler, 1944							
%		f. t.					
0		81					
42		61		E			
96		100					
Sorum and Durand, 1952							
%		f. t.					
0		80.0					
-		59.0		E			
100		95.5					
Rastogi and Varma, 1956 (fig.)							
mol%		f. t.		mol%		f. t.	
0		80		60		70	
10		77		70		80	
20		74		80		87	
30		70		90		92	
48.7		54.1 E		100		95	

Naphthalene ($C_{10}H_8$) + 2-Naphthol ($C_{10}H_8O$)

Speranski, 1903

mol%	60°	65°	p 70°	75°	80°
100	19.2	29.7	45.1	67.5	99.4
85.4	17.4	26.7	40.4	60.1	88.2
82.7	17.7	27.0	40.6	60.0	87.6
82.6	17.7	26.9	40.2	59.3	86.2
66.4	15.1	23.1	34.8	51.7	75.7
53.7	12.4	19.1	29.0	43.5	64.1
27.8	9.2	13.5	19.9	29.0	41.8
20.2	10.0	14.3	20.1	28.0	38.5
75.4*	16.3	25.2	38.3	57.3	84.6

* = mechanic mixture

Vignon, 1891

mol%	f.t.
0	80
33.3	94
50	102
66	108
100	122

Crompton and Whiteley, 1895

mol%	f.t.	mol%	f.t.
0	79.8	60	107.2
10	84.6	70	111.1
20	88.6	80.25	114.1
30	94.0	90	119.5
40	98.9	100	122.2
50	103.9		

Küster, 1895

mol%	f.t.
0	79.01
5.19	80.88
12.39	83.63
20.47	87.17
34.06	93.30
43.75	97.30
54.22	101.20
70.78	107.33
91.68	115.47
100	118.74

Miers and Isaac, 1908

%	f.t.	m.t.	t spontan. cryst..
0	79.5	79.5	77
9.935	84.6	83.04	80.5
19.92	88.55	87.33	84
29.934	92.5	91.5	89.1
39.62	97.5	95.4	92.75
50.337	101.8	99.6	96.5
59.385	105.4	103.23	101
68.123	108.9	107.2	104.2
79.97	113.2	112.4	108.8
90.773	117.9	117.25	113
100	121	121	117.5

Rudolfi, 1909

%	mol%	f.t.	min.	ε	d
				at room temp.	
0	0	80	-	2.62	1.158
10	9.0	84	4	2.68	-
20	18.2	88	7	2.71	1.189
30	27.6	91.5	9	2.76	-
40	37.3	95.5	11.5	2.83	1.201
50	47.0	100	13	2.91	-
60	57.1	103.5	10.5	2.95	-
70	67.4	108	10	2.96	1.243
80	78.0	114	10	3.02	-
90	88.9	117.5	7.5	3.06	-
100	100	121.5	-	3.15	1.251

Rheinboldt and Kircheisen, 1926

%	f.t.	m.t.
0.0	80.0	79.5
14.6	86.0	80.5
16.7	88.0	81.5
31.9	93.0	83.5
37.3	95.0	84.5
50.1	99.5	88.5
59.0	104.0	93.0
78.2	113.5	103.5
88.0	117.0	109.5
100.0	122	120.5

Kofler, 1942

Isodimorphism

Naphthalene ($C_{10}H_8$) + o-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.
0	218.0
36.5	216.3
100	219.75

Naphthalene ($C_{10}H_8$) + o-Cyanphenol (C_7H_5ON)

Auwers, 1899

%	D f. t.
2.14	-1.01
7.15	2.30
12.89	3.30
15.43	3.68

Naphthalene ($C_{10}H_8$) + o-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	79.9	-
2.5	107.5	79.9
5	107.5	79.9
5	121.5	79.9
10	132.7	79.9
20	145.0	79.9
40	156.5	79.7
60	162.5	79.3
80	167.5	79.5
100	173.8	-

Naphthalene ($C_{10}H_8$) + m-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	79.9	-
2.5	79.2	79.1
5	83.0	79.2
10	92.0	79.0
20	105.0	78.8
40	107.0	78.8
60	108.2	78.8
71.87	109.2	78.8
75.35	110.2	78.8
80	111.1	78.8
90	113.8	78.8
100	117.8	-

Naphthalene ($C_{10}H_8$) + Γ -Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	79.9	-
2.5	122.3	80.0
5	141	80.0
10	156.0	80.0
20	167.2	80.0
30	174.5	80.0
56.00	177.5	79.8
71.87	180.0	80.0
75.35	180.1	79.7
80	181.0	79.9
88.46	183.8	79.8
100	187.0	-

Naphthalene ($C_{10}H_8$) + o-Nitrophenol ($C_6H_5O_3N$)

Lecat, 1949

%	b. t.	Sat. t.
0	218.0	
60	215.7 Az	42.5
100	217.2	

Auwers, 1899

%	D f. t.	%	D f. t.
0.97	-0.47	40.33	-22.68
4.18	2.09	45.11	26.09
12.17	6.24	49.44	29.47
19.20	10.03	54.59	33.31
25.62	13.70	58.59	36.94
30.43	16.86	61.51	39.50
36.15	20.09		

Kremann, 1904

%	f. t.	%	f. t.
0	80.5	67.2	34.8
8.4	77.0	67.7	34.0
18.7	71.0	70.3	32.0
29.7	64.0	70.6	31.0
35.9	60.5	72.8	31.0
42.1	56.0	77.8	34.0
47.1	52.5	88.8	39.0
51.2	49.0	94.7	42.0
58.1	44.0	100	45.0
63.0	39.5		

Sapozhnikov, 1904

%	f. t.	%	f. t.
0	79.5	58.5	36.9
12.2	72.8	62.8	35.6
15.3	71.0	63.9	34.5
20.0	68.1	67.2	29.7
24.1	65.45	69.1	29.9
29.9	67.2	72.0	30.3
39.3	55.3	86.0	37.0
55.4	42.9	100	44.5

Sorum and Durand, 1952

%	f. t.
0	80.1
-	30.2 E
100	45.0

Petrucchi and Sorum, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	80.0	60	43
10	77	70	32
20	71	80	37.5
30	64.5	90	43
40	57.5	100	44.9
50	51		

E : 71 mol% 30.0°

mol% t where
 n = 1.5897 n = 1.5795 n = 1.5700

0	80.5	-	-
20	65.5	-	-
30	58	79	-
50	51	66.5	-
60	39.5	61	80
70	34	55.5	74.5
90	23	44.5	64.5
100	-	40	59

Naphthalene ($C_{10}H_8$) + p-Nitrophenol ($C_6H_5O_3N$)

Campbell and Campbell, 1941

% L		% V	
73.0		2.00	
89.8		4.32	
95.0		12.4	

Auwers, 1899

%	D f. t.
1.07	-0.51
4.76	1.99
9.22	3.39
12.99	4.28
16.50	5.01
20.05	5.76
23.22	6.27

Kremann, 1904

%	f. t.	%	f. t.
0.0	80.5	51.7	87.0
6.7	78.0	57.4	89.0
19.4	75.0	62.7	92.0
29.1	75.0	70.4	95.5
39.8	81.0	81.2	102.0
42.8	82.5	90.7	107.0
46.6	84.5	100.0	113.0
48.1	85.0		

Rheinboldt, 1925

%	mol%	f. t.	E
0	0.0	80.5	80.0
11.8	11.0	77.0	73.0
25.3	23.8	73.5	"
33.3	31.5	77.0	"
49.8	47.7	85.0	"
62.3	60.4	92.0	"
73.0	71.4	98.0	"
75.7	74.2	99.2	"
89.1	88.3	107.5	73.5
100.0	100.0	113.0	111.5

Sorum and Durand, 1952

%	f. t.
0	80.1
-	71.0 E
100	113.0

Campbell and Campbell, 1941

%	mol%	d
117.3°		
0.00	0	0.9554
10.09	9.37	0.9779
14.77	13.76	0.9879
21.52	20.15	1.007
44.28	42.26	1.070
48.38	46.33	1.084
59.62	57.62	1.121
66.49	64.63	1.148
79.89	78.54	1.195
89.71	88.92	1.236
100.00	100.00	1.282

%	n	%	n
121°			
0.0	440	49.8	1055
11.8	478	62.3	1350
25.3	600	73.0	1615
33.3	750	89.8	2045
		100.0	2560

%	mol%	σ
121.°		
0.00	0	29.3
11.8	11	29.9
25.3	24	31.0
33.3	31.5	31.8
49.8	48	33.7
62.3	60	34.8
73.0	71	37.7
89.8	88	41.8
95.0	93	43.4
100.0	100	46.3

Naphthalene ($C_{10}H_8$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann, 1904

%	f. t.	%	f. t.
0.0	80.5	53.7	92.0
4.3	79.0	54.8	91.8
9.6	76.5	58.7	92.0
16.4	73.5	59.8	92.0
22.2	74.0	61.9	92.0
27.6	79.5	64.0	91.5
36.7	87.0	64.4	90.6
40.1	88.5	69.4	89.5
41.2	89.0	74.9	90.0
45.5	90.5	83.3	96.0
46.4	90.5	91.9	104.0
51.2	91.5	100	110.0
(1+1)			

Sapozhnikov, 1904

%	f. t.	%	f. t.
0	79.5	50.0	91.7
10.9	72.9	60.0	91.3
14.8	72.0	67.6	90.9
18.9	77.4	73.6	95.6
24.5	83.9	88.3	104.9
35.8	90.4	100	111.4
(1+1)			

Buehler and Heap, 1926

(1 + 1) f. t. = 94.7° - 95.0°

Naphthalene ($C_{10}H_8$) + Picric acid ($C_6H_3O_7N_3$)

Kremann, 1904

%	f. t.	%	f. t.
0.0	80.0	53.3	146.0
7.0	78.5	55.1	146.0
15.2	104.5	58.5	147.0
21.2	115.0	61.3	147.0
25.9	123.5	61.8	147.0
30.3	130.0	63.3	147.0
35.4	135.0	67.7	147.0
38.4	137.5	73.3	145.0
40.4	140.0	79.3	142.0
41.1	140.0	84.6	135.0
44.7	142.0	89.8	124.0
48.4	144.0	95.0	112.5
51.0	145.0	100.0	122.5

(1+1)

Sapozhnikov, 1904

%	mol%	f. t.
0	0	80
10	5.86	79
20	12.30	77.5
25	15.70	122
30	19.31	129
40	27.14	139
50	35.84	144.5
60	45.59	149
64.15	50	149.5
70	56.65	149
80	69.10	142.5
90	83.41	129
95	91.41	115
97.5	95.62	118
100	100	122.5

(1+1)

Rudolfi, 1909

%	mol%	f. t.	E	min.
0	0	80	-	-
5	2.9	79	78	40
10	5.8	83	78	47
20	12.3	111	78.5	43
30	19.3	127	78	35
40	27.1	140	79	28
50	35.1	146	80	17
60	45.6	151	78	5
70	56.6	148	112	4.5
80	69.1	140	114	10
90	83.4	121.5	115	17
95	91.4	116	114	11
100	100	122	-	-

(1+1)

De Gee, 1916 (fig.)

mol%	f. t.	mol%	f. t.
0	80	50	150.7
5	77.1 E	60	148
10	110	70	140
20	130	80	130
30	140	90	113.4 E
40	148	100	121.5

(1 + 1)

Rheinboldt, 1925

%	mol%	f. t.	E
0.0	0.0	80.5	80.0
7.5	4.3	79.0	78.0
9.5	5.5	85.0	78.5
11.0	6.5	99.0	78.0
13.9	8.3	109.5	"
20.9	12.9	122.0	78.5
23.8	14.9	128.0	"
30.3	19.6	136.0	"
37.6	25.2	138.5	"
50.4	36.2	146.5	79.0
53.9	39.0	147.0	79.5
56.2	41.8	149.0	"
59.5	45.1	149.5	80.0
62.9	48.7	150.0	137.0
67.1	53.3	149.5	112.0
71.3	58.1	147.5	111.0
77.0	65.2	144.0	"
79.3	68.2	143.0	"
83.1	73.3	138.5	"
91.1	85.1	124.0	"
94.6	90.7	115.0	"
94.7	90.9	112.5	"
97.6	95.8	118.5	112.0
100.0	100.0	122.5	122.2

(1 + 1)

Rudolfi, 1909

%	d	ϵ
at room temp.		
0	1.158	2.64
5	-	-
10	-	2.66
20	-	2.67
30	1.300	2.69
40	-	2.70
50	-	2.73
60	1.467	2.80
70	-	1.88
80	1.612	2.93
90	-	2.99
95	-	-
100	1.764	3.05

Milone and Rossignoli, 1932

%	Q comb. (cal/gr)
0	9616
10	8897
20	8156
30	7425
40	6707
50	5966
64.14	4964
70	4778
80	4110
90	3411
100	2709

Naphthalene ($C_{10}H_8$) + Trinitrocresol s.
($C_7H_5O_7N_3$)

Sapozhnikov, 1904

%	mol%	f. t.
0	0	80
10	5.55	76.4
20	11.69	93
30	18.42	105
40	25.99	113
50	34.49	120
60	44.13	124
65.5	50	124.5
70	55.13	124
80	72.63	118
90	82.58	103
95	91.13	91
97.5	95.35	93
100	100	103

(1 + 1)

Naphthalene ($C_{10}H_8$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E	%	f. t.	E
0	80.0	-	60	164.6	79.0
2.5	79.7	-	65.68	165.5	-
5	81.2	-	67.5	165.1	-
10	99.4	79.2	70	164.5	147.7
15	110.9	79.3	75	163.1	148.8
20	121.4	79.0	80	159.2	148.8
30	137.2	79.1	85	151.0	148.8
40	149.1	79.2	90	158.3	147.8
45	154.2	79.2	95	167.5	146.9
50	158.3	79.2	97	171.9	-
55	162.4	79.2	100	175.5	-

(1+1)

1-Methylnaphthalene ($C_{11}H_{10}$) + Resorcinol
($C_6H_6O_2$)

Francis, 1944

C.S.T. = 108

2-Methylnaphthalene ($C_{11}H_{10}$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	41
20	62
40	75
60	82
80	90
90	93

2-Methylnaphthalene ($C_{11}H_{10}$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	40
20	58
40	75
60	83
80	91
90	95

Lecat, 1949

2-Methylnaphthalene ($C_{11}H_{10}$) (b.t. = 241.15) +
Phenols

	2nd Comp.	Az		
Name	Formula	b. t.	%	b. t.
Pyrocatechol	C ₆ H ₆ O ₂	241.15	37	233.25
Resorcinol	C ₆ H ₆ O ₂	281.4	10.5	140.05
Pyrogallol	C ₆ H ₆ O ₃	309	6	240.6
Nonomethyl resorcinol	C ₇ H ₈ O ₂	243.8	25	240.2

2-Methylnaphthalene ($C_{11}H_{10}$) + 2-Naphthol
($C_{10}H_8O$)

Grimm, Günther and Tittus, 1931 (fig.)

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	121	121	70	70	44
10	118.5	101	80	52	37
20	114	89	83.5	-	32
30	109	77.5	86	44	-
40	102	69	90	42	32
50	94	58.5	95	-	32
60	83.5	51	100	37	37

1-Ethynaphthalene ($C_{12}H_{12}$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	62
20	75
40	85
60	90
80	94
90	96

1-Ethynaphthalene ($C_{12}H_{12}$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	60
20	73
40	83
60	90
80	95
90	98

1-Propylnaphthalene ($C_{13}H_{14}$) + Picric acid
($C_6H_3O_7N_3$)

Morrell, Pickering and al., 1948

mol%	f.t.	m.t.
0	-9	-13
10.6	+35	+30
19.0	68	-
32.4	84	-
35.5	86	-
42.0	86	85
50.0	86	84
60.0	92	91
67.0	97	-
100	+121	-

2-Isopropylnaphthalene ($C_{13}H_{14}$) + m-Cresol
(C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	42
20	63
40	81
60	89
80	95
90	97

2-Isopropylnaphthalene ($C_{13}H_{14}$) + p-Cresol
(C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	55
20	73
40	86
60	91
80	94
90	97

Isopropyl naphthalene ($C_{13}H_{14}$) + Resorcinol
($C_6H_6O_2$)

Francis, 1944

C.S.T. = 153

Isopropyl naphthalene ($C_{13}H_{14}$) + Hydroquinone
($C_6H_6O_2$)

Francis, 1944

C.S.T. = 198

2-Amylnaphthalene ($C_{15}H_{18}$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.
L V

760 mm

10	67
20	80
40	90
60	94
80	97
90	98

2-Amylnaphthalene ($C_{15}H_{18}$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.
L V

760 mm

10	72
20	81
40	89
60	95
80	98
90	99

Sec. Amylnaphthalene ($C_{15}H_{18}$) + Hydroquinone
($C_6H_6O_2$)

Francis, 1944

C.S.T. = 229

Naphthalenic Hydrocarbons + Phenols

Francis, 1944

Systems C.S.T.

Diisopropyl naphthalene ($C_{16}H_{20}$) + Hydroquinone ($C_6H_6O_2$)	233
Di(tert. Butyl)naphthalene ($C_{18}H_{24}$) + above 100 Pyrocatechol ($C_6H_6O_2$)	
Di(tert. butyl)naphthalene ($C_{18}H_{24}$) + Hydroquinone ($C_6H_6O_2$)	257
Diamylnaphthalene ($C_{20}H_{28}$) + Pyrocatechol ($C_6H_6O_2$)	136
Diamylnaphthalene ($C_{20}H_{28}$) + Ben- zyl-Hydroxybenzoate ($C_{14}H_{12}O_3$)	below 80
Diamylnaphthalene ($C_{20}H_{28}$) + m-Aminophenol (C_6H_7ON)	195
Diamylnaphthalene ($C_{20}H_{28}$) + p-Aminophenol (C_6H_7ON)	220
Diamylnaphthalene ($C_{20}H_{28}$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)	117

Diisopropyl naphthalene ($C_{16}H_{20}$) + m-Cresol
(C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.

L V

760 mm

10	80
20	88
40	93
60	97
80	99
90	99.5

Diisopropylnaphthalene ($C_{16}H_{20}$) + p-Cresol
(C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% at b.t.	
L	V
760 mm	
10	60
20	89
40	94
60	97
80	99
90	99.5

1-Benzyl naphthalene ($C_{17}H_{14}$) + Trinitroresorcinol
s. ($C_6H_3O_6N_3$)

Efremov, 1916

%	f. t.	E	%	f. t.	E
100	175.5	-	45	133.8	32.2
95	170.1	-	40	132.0	45.0
90	164.9	-	35	129.6	47.3
85	160.2	117.8	30	125.3	47.3
80	155.0	129.3	20	111.2	47.3
70	148.1	133.9	15	102.0	47.5
65	141.8	133.9	10	88.8	47.4
60	137.6	133.9	5	67.7	48.0
55	134.1	-	2.5	52.7	-
52.92	134.3	-	1.5	48.3	-
50	134.2	-	0	51.3	-
(1+1)					

1-Benzyl naphthalene ($C_{17}H_{14}$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	%	f. t.	E
100	122.4	-	45	95.4	34.6
95	117.9	-	40	91.8	37.8
90	111.8	67.3	35	86.4	"
85	106.3	81.1	30	79.1	"
80	100.7	87.3	25	69.5	"
70	92.0	83.15	20	60.4	"
65	87.8	-	15	50.2	37.7
60	91.8	-	10	40.6	-
55	95.3	-	5	44.1	28.2
51.23	97.0	-	2.5	47.7	-
50	96.6	-	0	51.3	-
(1+1)					

Anthracene ($C_{14}H_{10}$) + Phenols.

Vignon, 1891

mol%		f. t.	
+ Resorcinol ($C_6H_6O_2$)	+1-Naphthol ($C_{10}H_8O$)	+2-Naphthol ($C_{10}H_8O$)	
100	110	92	122
66.67	180	149	153
50	186	169	170
33.3	190	180	184
0	213	213	213

Anthracene ($C_{14}H_{10}$) + 2-Naphthol ($C_{10}H_8O$)

Rudolfi, 1909

%	f. t.	E
100	121	-
95	117	-
90	114	-
85	114	107
80	125	109
70	141.5	109
60	158	110
50	167.5	109
40	176.5	108
30	186	110
20	194	106
10	200	108
0	213	-

Anthracene ($C_{14}H_{10}$) + o-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
100	173.8	-
97.5	173.6	169.3
95	173.5	169.3
90	171.9	169.0
77.73	170.0	168.0
60	178.0	167.8
40	189.0	167.9
20	199.0	167.8
10	205.2	168
0	211.2	-

Anthracene ($C_{14}H_{10}$) + m-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

mol%	f.t.	E
100	117.8	-
97.5	118.8	118.6
95	137.3	118.7
90	159.0	118.9
80	175.0	118.3
78.73	175.5	118.5
71.0	184.0	118.5
60	189.0	118.2
40	194.3	118.5
29	198.0	118
20	200.3	-
10	205.7	-
0	211.2	-

Anthracene ($C_{14}H_{10}$) + p-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

mol%	f.t.	E
100	187.0	-
95	186.2	181.3
90.56	184.3	182
84.64	183.3	181.3
80	184.8	181.7
78.73	185.2	181.5
71.0	190.3	181.7
64.76	191.7	181.6
60	192.3	181.6
40	197.5	181.0
20	203.4	-
0	211.2	-

Anthracene ($C_{14}H_{10}$) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Müller, 1921

%	f.t.	%	f.t.
100	44.5	51.7	168.0
97.3	47.0	50.7	169.0
93.2	72.0	44.7	175.0
84.6	113.0	42.4	177.0
76.0	132.0	33.8	186.0
71.7	142.0	25.2	201.0
63.2	154.0	5.9	209.0
57.4	161.0	0	212.0

Anthracene ($C_{14}H_{10}$) + m-Nitrophenol ($C_6H_5O_2N$)

Kremann and Müller, 1921

%	f.t.	%	f.t.
0	212.5	54.6	179.5
11.1	208.0	54.8	179.5
18.3	204.0	60.6	174.0
29.5	196.0	68.1	166.0
37.6	189.0	76.6	156.0
43.8	186.05	85.8	139.5
44.9	186.4	91.8	124.0
45.9	186.0	96.6	93.0
48.7	184.5	100	95.5

Anthracene ($C_{14}H_{10}$) + p-Nitrophenol ($C_6H_5O_2N$)

Kremann and Müller, 1921

%	f.t.	%	f.t.
0	212.5	61.2	175.0
12.0	204.0	64.8	171.0
18.5	200.5	67.2	169.0
27.4	196.0	71.4	163.5
38.1	190.5	78.3	155.0
43.4	187.5	85	142.0
48.1	185.0	92.6	113.0
51.5	183.0	100	113.5
56.1	179.1		

Anthracene ($C_{14}H_{10}$) + 2,4-Dinitrophenol
($C_6H_4N_2O_5$)

Kremann and Müller, 1921

%	f.t.	%	f.t.
0	213.0	58.4	153.5
4.3	210.5	60.6	150.0
9.5	207.0	66.4	140.0
15.2	203.0	75.0	123.0
23.4	196.0	81.1	108.0
33.5	185.0	84.5	101.0
41.8	176.5	88.8	105.0
47.2	162.0	95.2	109.0
53.0	162.0	100	110.0

Kofler, 1944

%	f.t.
87 - 88	103 E
100	113

Anthracene ($C_{14}H_{10}$) + Picric acid ($C_6H_3O_7N_3$)

Kremann, 1904

(fig.)

%	f.t.	%	f.t.
0	213	63.8	140.5
36.6	177.0	64.1	142.0 sic.
44.1	169.0	66.7	139.0
48.2	164.0	69.9	136.0
51.7	159.5	71.4	136.0
53.2	157.0	72.9	133.0
54.5 ₆	155.0	75.2	132.0
55.8	153.0	80.7	125.0
56.2	153.0	81.1	126.0
56.2	152.5	86.3	114.0
56.3	152.5	91.2 ₂	112.0
57.3	151.0	94.0	114.5
59.1	148.0	97.5 ₅	119.0
59.8	147.0	99.0	120.5
60.7	144.0	100	122.5
62.8	141.0		

Rheinboldt, 1925

%	mol%	f.t.	m.t.
0.0	0.0	216.5	216.0
10.1	8.0	207.5	144.5
29.6	24.6	190.0	142.0
34.9	29.4	184.0	141.5
38.8	33.0	178.0	142.0
49.6	43.3	162.0	142.0
51.6	45.3	159.0	141.0
52.7	46.4	157.5	141.0
56.8	50.5	150.5	141.5
58.1	51.9	146.5	134.0
60.3	54.2	143.5	110.5
63.5	57.5	140.5	110.5
72.3	67.0	134.0	109.5
80.7	76.5	125.0	110.0
89.8	87.3	112.5	110.0
97.1	96.3	118.5	110.5
100.0	100.0	122.5	122.0

Milone and Rossignoli, 1902

%	Q comb. (cal/g)
0	9467
10	8773
20	8091
30	7407
40	6735
50	6100
60	5471
70	4908
80	4220
90	3470
100	2709

Anthracene ($C_{14}H_{10}$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	E	%	f.t.	E
100	175.5	-	57.9	176.3	-
97	171.3	-	55.0	176.0	-
95	168.8	149.2	50	173.6	170.1
90	160.7	151.4	45	171.0	-
85	152.2	-	40	179.5	170.1
80	158.4	151.4	35.0	185.7	170.1
75	165.3	151.2	30	191.0	165.9
70	170.4	151.4	20	201.7	164.2
65	174.4	-	10	208.3	161.9
64	174.6	-	5.0	210.6	-
60	175.0	-	0	213.0	-

(1 + 1)

Phenanthrene ($C_{14}H_{10}$) + Pyrocatechol ($C_6H_6O_2$)

Bernoulli and Sarasin, 1930

%	f.t.	E.
0	97.0	-
5	92	84.4
10.1	89.1	84.4
18.0	87.4	85.2
25.1	85.7	-
30.2	86.4	85.0
49.9	93	85.1
70	96	84.7
90	101	84.6
94.9	102.3	83.2
97.1	102.8	83.5
100	103.6	-

Phenanthrene ($C_{14}H_{10}$) + Resorcinol ($C_6H_6O_2$)

Bernoulli and Sarasin, 1930

%	f.t.	E
0	97.0	-
3.2	94.9	91.8
5.1	94.7	91.6
6.9	92.2	-
10	97.5	92.6
19.9	102.7	92.5
30.0	102.8	92.6
40.9	102.2	92.4
50.0	102.5	92.2
60	103.0	92.9
70.3	102.8	92.35
80	103.0	92.3
90.2	106.5	92.1
100	110.0	-

Francis, 1944

C.S.T. = 111

Phenanthrene ($C_{14}H_{10}$) + Hydroquinone ($C_6H_6O_2$)

Bernoulli and Sarasin, 1930

%	f. t.	E
0	97.0	-
3	121.5	96.4
5	134.3	96.25
9.9	143.5	96.0
20	157.0	96.1
35.2	163.0	96.4
50.1	164.0	95.9
74.6	165.0	94.6
90	170.0	93.0
95	171.0	93.0
100	173.1	-

Phenanthrene ($C_{14}H_{10}$) + o-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	97.2	-
2.5	108.0	96.7
5	123.0	96.5
10	139.1	96.5
20	152.0	96.8
40	160.5	96.3
60	165.3	96.3
80	170.0	95
100	173.8	-

Phenanthrene ($C_{14}H_{10}$) + m-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	97.2	-
5	94.3	94.3
10	98.9	94.3
13.28	100.8	94.3
20	107.3	94.1
29.0	108.8	94.4
40	111.2	94.3
56.75	111.6	94.2
60	112.1	94.3
78.7	113.1	94.2
80	113.3	94.2
84.64	114.5	94.0
90	116.0	94.0
95	117.3	92.2
100	117.8	-

Phenanthrene ($C_{14}H_{10}$) + p-Aminophenol (C_6H_7ON)

Bernoulli and Lotter, 1933

%	f. t.	E
0	97.2	-
2.5	131.7	96.6
5	150.0	96.7
10	163.0	96.7
20	172.2	96.3
40	178.2	97.0
56.75	180.5	97.0
78.73	183.0	97.0
88.46	186.2	94
100	187.0	-

Phenanthrene ($C_{14}H_{10}$) + 2,4-Dinitrophenol($C_6H_4N_2O_5$)

Kremann and Hofmeier, 1910

%	f. t.	%	f. t.
100	111	51.6	72
97.1	109	51.5	74
93.0	107	48.3	72
87.6	104	45.4	67
84.9	101	42.3	64
80.2	98	38.4	68
76.1	96	34.3	73
72.5	93	29.3	78
68.4	90	24.1	83
64.8	87	16.7	90
60.3	82	10.6	96
56.6	77	4.4	100
55.7	77	0	103

Kofler, 1940

%	f. t.
0	100
-	73 E
100	84

Phenanthrene ($C_{14}H_{10}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1910

%	f. t.	E	%	f. t.	E
100	122.4	-	54	131.9	80.6
97	117.6	-	50	128.6	81.0
95	114.1	-	45	123.6	81.1
90	107.4	81.6	40	116.0	81.2
85	99.8	88.8	35	107.5	81.6
80	98.6	93.6	30	95.0	81.4
75	109.6	93.8	25	83.4	79.7
70	118.5	"	20	84.9	78.8
65	125.9	93.7	10	94.2	74.8
60	130.7	92.8	5	97.1	-
56.25	132.8	-	0	99.2	-

(1+1)

Phenanthrene ($C_{14}H_{10}$) + Trinitrocresol s.
($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E	%	f. t.	E
100	101.2	-	50.0	111.0	81.3
95.0	97.1	79.2	45.0	107.9	83.0
90.0	90.0	84.3	40.0	103.3	83.7
85.0	86.8	85.6	30.0	92.7	84.2
80.0	92.7	85.5	25.0	87.5	84.3
75.0	98.0	84.5	20.0	85.8	84.2
70.0	103.4	83.2	15.0	89.3	83.6
65.0	108.2	78.6	10.0	93.0	82.5
60.0	112.4	-	5.0	96.0	-
57.72	112.9	-	0.0	99.0	-
51.0	112.7	-			

(1+1)

Phenanthrene ($C_{14}H_{10}$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E	%	f. t.	E
100	175.5	-	55	131.8	-
97	172.6	-	50	129.0	83.8
95	170.7	-	45	125.1	85.7
90	165.3	122.8	40	120.4	85.7
85	151.7	124.6	30	107.6	85.7
80	146.5	125.6	25	100.3	85.8
75	136.5	125.6	20	89.2	-
70	126.6	-	15	88.5	85.7
67.5	129.7	125.1	10	91.5	83.6
64	132.3	125.0	5	95.2	75.3
60	132.6	-	2.5	97.2	-
57	132.7	-	0	99.2	-

(1+1)

Retene ($C_{18}H_{18}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	%	f. t.	E
100	122.4	-	45	117.3	54.6
97	119.5	-	40	108.5	57.9
95	117.5	-	30	88.4	60.2
90	114.0	91.2	25	73.6	60.3
80	105.3	96.8	20	60.1	-
75	100.9	-	15	73.5	60.2
70	105.6	110.7	10	82.5	55.4
60	115.6	100.7	5	90.0	-
55	119.6	98.8	0	95	-
50	120.9	-			

(1+1)

Retene ($C_{18}H_{18}$) + Trinitrocresol sym. ($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E	%	f. t.	E
100	101.2	-	45	117.6	65.0
95	92.2	87.4	40	115.2	66.0
90	92.6	88.8	35	111.0	68.2
85	97.0	86.7	30	105.2	70.4
80	101.2	84.8	25	98.5	72.5
75	104.5	83.0	20	90.7	72.9
70	108.4	76.5	15	81.4	73.2
65	111.8	-	10	74.8	-
60	114.6	-	5	86.4	70.6
55.0	117.0	-	2.5	91.5	53.3
50.95	118.3	-	0	95.2	-
50	118.3	-			

(1+1)

Retene ($C_{18}H_{18}$) + Trinitroresorcinol sym.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E	%	f. t.	E
100	175.5	-	50	135.6	-
97	173.6	-	46	134.2	-
95	172.5	-	40	130.3	71.3
90	169.1	123.7	35	122.0	75.5
85	161.6	125.6	30	111.4	76.2
80	153.2	125.6	25	98.1	76.2
75	143.7	125.6	20	84.8	76.2
70	131.3	125.6	15	83.7	76.0
65	126.3	-	10	84.8	71.0
62.5	129.8	125.7	5	90.0	-
60	132.2	126.4	2.5	92.8	-
55	135.1	-	0	95.2	-
51.15	135.7	-			

(1+1)

Pyrene ($C_{16}H_{10}$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Shinomiya, 1940

mol%	E	f.t.
0.0	-	150.0
7.7	120.0	143.0
18.0	120.0	132.5
33.5	120.0	134.5
44.8	125.0	145.0
45.6	120.0	146.0
50.6	143.0	146.5
53.0		146.0
61.0	101.5	143.0
80.5	101.0	113.0
92.4	101.0	109.0

E 1 : 26.4% - 120.0°

2 : 84.4% - 101.0

(1 + 1) 146.3°

Pyrene ($C_{16}H_{10}$) + Trinitrocresol ($C_7H_5O_7N_3$)

Shinomiya, 1940

mol%	f.t.	E
0	150.0	-
10.9	140.0	135.0
23.5	148.0	134.5
29.0	152.0	135.0
44.9	161.0	151.0
52.9	163.0	158.0
57.8	161.0	144.0
69.9	153.5	83.0
75.4	147.0	100.0
84.7	132.5	102.0

E 1 : 92.5 mol% - 101.0°

2 : 15.23mol% - 135.0°

(1 + 1) : 163.0°

Indene (C_9H_8) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	182.6
47	177.8 Az
100	182.2

Indene (C_9H_8) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b.t.
0	182.6
9	182.5 Az
100	191.1

Fluorene ($C_{13}H_{10}$) + Resorcinol ($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	295
48	274.0 Az
100	281.4

Francis, 1944

C.S.T. = 105

Acenaphthene ($C_{12}H_{10}$) (b.t. = 277.9) + Phenols.

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Pyro-catechol	$C_6H_6O_2$	245.9	84	245.25	-
Resorcinol	$C_6H_6O_2$	281.4	40	266.2	105
					(40%)
Pyro-gallol	$C_6H_6O_3$	309	20	272.8	-

Acenaphthene ($C_{12}H_{10}$) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Haas, 1919

%	f. t.	E	%	f. t.	E
100	44.5	-	53.5	55.2	-
92.2	40	-	49.3	59.2	-
87.5	38	-	47.0	60.5	31.5
85.1	36.8	-	45.6	62.5	-
83.2	36	32	40.6	65.6	-
75.7	-	32	31.6	71.5	-
71.9	37.5	-	23.8	76	-
66.4	43.5	-	9.2	85.1	31.5
55.4	52.5	-	6.5	87	-
			0	90.5	-

Efremov, Ferdermeer, Prinkman, 1936

mol%	f. t.	tr. t.	E
0	96.2	-	-
5.51	93.3	-	-
10.88	91.0	-	-
21.69	84.3	44.5	-
26.95	81.3	51.3	-
32.20	78.6	57.0	-
41.79	71.6	64.3	-
47.17	68.3	64.6	-
50.00	65.5	-	27.0
52.56	65.5	-	31.6
57.50	63.5	-	31.6
62.43	60.7	-	33.3
72.35	49.0	-	34.0
76.97	37.3	-	34.4
81.58	36.3	-	34.4
90.89	40.6	-	35.5
95.46	42.7	-	30.7
100.0	45.5	-	-

(1+1)

Sorum and Durand, 1952

%	f. t.
0	90.0
-	32.9 E
100	44.5

Acenaphthene ($C_{12}H_{10}$) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Haas, 1919

%	f. t.	E	%	f. t.	E
100	94.8	-	39.4	76.5	-
93.7	91.8	-	36.2	77.5	-
84.4	86.5	-	30.8	79	73.5
75.3	82.8	73.5	27.8	80	-
68.4	79.8	-	22.1	81.5	73.5
61.2	76	-	18.2	82.5	-
55.4	74.2	73.5	13.6	84.5	-
53.1	74	-	10.6	85.7	-
49.2	74.5	-	4.7	87.9	-
44.3	75	-	0	90.5	-

Acenaphthene ($C_{12}H_{10}$) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Haas, 1919

%	f. t.	E	%	f. t.	E
100	111.8	-	47.2	85.3	-
92.0	107.5	-	42.4	83.5	80
88.6	105.5	-	35.2	81.5	80
79.8	100.5	80	27.8	81.8	-
69.6	95.6	-	14.6	85.5	-
62.8	92.8	-	9.4	87.2	80.0
57.7	90.0	-	6.2	88.3	-
51.2	87.5	-	3.4	89.3	-
52.0	87.2	80	0	90.5	-

Sorum and Durand, 1952

%	f. t.
0	90.0
-	76.0 E
100	113.5

Acenaphthene ($C_{12}H_{10}$) + 2,4-Dinitrophenol
($C_6H_3O_5N_2$)

Kremann and Haas, 1919

%	f. t.	E
100	110	-
86.1	97.8	-
76.4	90	-
72.0	86.8	-
69.5	84.5	83
61.3	85	-
57.5	85.8	-
53.3	86	-
47.5	85	-
42.1	82.3	-
38.6	80	-
35.8	78.8	-
29.4	75.2	-
26.5	75	73.5
22.0	78	-
18.1	81	73.5
14.6	82.5	-
10.5	85	-
6	88	-
3	89.2	-
0	90.5	-

(1+1)

Acenaphthene ($C_{12}H_{10}$) + Trinitrocresol s.
($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E
100	101.2	-
95	94.3	82.7
90	89.6	87.5
85	98.7	87.3
80	106.2	85.2
75	111.2	80.7
70	114.7	-
65	117.2	-
61.22	117.9	-
60	117.9	-
55	117.5	80.0
50	116.6	82.3
45	114.2	84.5
40	110.7	84.6
35	106.4	84.8
30	99.8	84.8
25	92.5	84.8
20	84.8	-
15	87.8	84.5
10	90.8	81.5
5	93.7	74.6
2.5	95.0	-
0	96.2	-

(1+1)

Acenaphthene ($C_{12}H_{10}$) + Trinitroresorcinol
($C_6H_3O_8N_3$)

Efremov, 1916

%	f. t.	E
100	175.5	-
97	172.4	-
95	170.7	-
90	170.7	-
85	155.3	136.5
80	141.8	136.1
75	144.6	136.0
70	152.6	136.1
64.5	155.1	136.3
61.40	156.0	-
60	155.8	-
55	153.9	-
50	149.7	86.0
45	144.8	89.0
40	138.9	89.5
35	132.6	89.5
30	124.7	88.7
25	117.0	89.5
20	108.5	89.4
15	97.5	89.4
10	90.5	-
5	93.5	80.3
2.5	94.9	-
0	96.2	-

(1+1)

Acenaphthene ($C_{12}H_{10}$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	min.
100	122.4	-	-
97	119.8	108.5	-
95	117.4	112.3	48
90	117.1	112.3	144
85	140.8	112.3	120
80	150.2	112.4	96
75	155.0	110.5	72
70	157.7	108.8	60
65	159.8	103.3	35
62.5	160.6	-	-
59.8	160.8	-	-
57.5	160.5	-	-
55	159.8	81.6	50
50	155.8	85.9	90
45	151.9	87.0	160
40	145.6	87.6	250
35	139.1	87.6	350
30	129.4	87.6	460
25	121.3	87.6	530
20	110.4	87.6	610
15	99.8	87.6	850
10	87.8	-	960
5	93.0	85.5	180
2.5	94.9	-	-
0	95.2	-	-

(1+1)

Kremann and Haas, 1919

%	f. t.	E
0	90.5	-
1.9	89.8	-
8.8	87.2	86.1
15.0	103	-
23.0	124	-
27.4	132	85.5
31.1	136	-
35.7	142.2	-
41.2	147.5	86.1
48.1	150.5	-
51.6	151	-
55.8	151	-
59.2	151.5	-
70.5	149.5	-
78.8	145.5	-
85.5	137	-
90.0	128	-
93.7	113.8	113.8
100	120.2	-

(1+1)

Acenaphthylene ($C_{12}H_8$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f. t.	E	min.
100	122.4	-	-
97.5	118.6	113.0	-
95	116.3	-	3.0
90	129.8	113.9	216
85	139.1	113.9	190
80	146.9	113.5	108
75	153.2	113.5	72
70	158.6	113.0	36
65	162.8	109.3	-
62.5	164.7	-	-
60.90	165.3	-	-
57.5	165.0	-	-
55	164.4	-	-
50	161.4	-	100
45	157.1	83.0	140
40	153.0	85.8	250
35	146.4	89.2	320
30	149.1	90.4	430
25	131.6	90.5	500
20	122.8	90.4	640
15	111.2	90.4	790
10	99.7	90.7	960
5	91.4	-	-
2.5	92.1	90.4	160
0	93.9	-	-

(1+1)

Fluorene ($C_{13}H_{10}$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Kremann, 1911

%	f. t.	%	f. t.
0	112.5	51.4	77
19.2	102.0	53.7	79.0
32.6	90.0	56.3	82.0
40	82.5	60.3	85.5
43.4	79	64.4	89.5
45.2	77.5	68.3	92
45.6	76.0	73.2	95.5
48.0	74	79.2	100
49.2	75	88.3	105
51.0	76.5	100	112

Fluorene ($C_{13}H_{10}$) + Trinitrocresol ($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E
100	101.4	-
95	95.2	83.6
90	89.8	85.4
85	86.8	86.0
80	93.4	86.4
75	99.2	84.7
70	103.5	83.7
65	106.2	78.6
60	107.1	75.6
59.42	107.1	-
55	106.6	-
50	104.8	89.6
45	102.6	90.1
40	99.0	90.5
35	94.2	90.4
30	91.8	90.4
25	96.4	90.5
20	100.4	89.4
15	103.4	89.2
10	106.8	88.0
5	110.5	86.4
0	112.3	-

(1+1)

Fluorene ($C_{13}H_{10}$) + Trinitroresorcinol s.
($C_6H_3O_6N_3$)

Efremov, 1916

%	f. t.	tr. t.	E
100	175.5	-	-
97	172.4	-	-
95	170.2	-	-
90	164.5	125.6	-
85	161.3	126.3	-
80	157.0	127.0	-
75	151.7	127.0	-
70	146.6	127.5	-
65	140.1	127.5	-
59.66	135.2	127.5	-
55	129.8	127.3	-
50	126.8	-	97.1
45	122.8	-	97.2
40	117.1	-	97.1
35	110.9	-	97.1
30	103.8	-	97.1
25	97.5	-	-
20	99.9	-	97.0
15	104.1	-	96.3
10	107.7	-	94.2
5	110.3	-	88.6
2.5	111.5	-	-
0	112.3	-	-

(1+1)

Fluorene ($C_{13}H_{10}$) + Picric acid ($C_6H_3O_7N_3$)

Kremann, 1911

%	f. t.	%	f. t.
0	112.5	55.6	84.0
5.55	110.0	60.1	83.5
13.65	105.5	63.1	82
21.82	99.0	67.9	84
29.64	92.5	76.9	96
36.81	86.0	82.3	103
43.93	81.0	89.9	111
47.26	82.0	100	122
51.36	84.0		

(1+1)

Fluoranthene ($C_{16}H_{10}$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Shinomiya, 1940

mol%	f. t.	E
0.0	109.5	-
5.3	105.0	85.5
15.5	99.0	75.5
27.5	83.0	75.0
27.6	83.0	75.0
30.3	78.2	75.0
39.5	88.0	74.5
49.1	92.0	90.5
50.5	91.0	86.0
60.0	87.5	84.5
62.2	87.0	84.0
69.5	94.0	84.0
79.0	101.8	84.5
87.4	106.0	85.0

E 1 : 31.2 % - 75.0°

2 : 61.2 % - 85.0°

(1 + 1) : 92.0°

Fluoranthene ($C_{16}H_{10}$) + Trinitrocresol s.
($C_7H_5O_7N_3$)

Shinomiya, 1940

mol%	f. t.	E
0	109.5	-
3.8	107.8	100.8
11.7	105.0	101.0
13.8	112.0	101.0
21.4	126.5	101.0
36.4	139.0	-
43.2	143.0	105.0
48.3	144.0	140.0
56.9	143.0	126.0
61.1	-	101.8
67.7	139.0	101.0
89.0	110.0	101.0

E 1 : 91.8 mol % - 110.0°

2 : 11.0 mol % - 110.0°

(1 + 1) : 144.0°

XXIV. HYDROCARBONS + ACIDS

Propane (C_3H_8) + Acids

Hixson and Hixson, 1941

Hixson and Bockelmann, 1942

Acid		vol%	sat.t.
Lauric	$C_{12}H_{24}O_2$	10	111.0
Myristic	$C_{14}H_{28}O_2$	9	104.5
"	"	10	104
Palmitic	$C_{16}H_{32}O_2$	12.2	96.3
Stearic	$C_{18}H_{36}O_2$	10	97
"	"	6.3	93.3
Oleic	$C_{18}H_{34}O_2$	10	90
"	"	10	90.5
Linoleic	$C_{18}H_{32}O_2$	9	79.8

Propane (C_3H_8) + Oleic acid ($C_{18}H_{34}O_2$)

Hixson and Hixson, 1941

%	f.t.	%	f.t.
2.7	98.4	27.4	91.6
3.1	97.2	32.1	92.2
5.0	94.2	37.6	92.9
5.3	95.4	40.0	93.6
9.3	91.8	40.3	94.5
9.4	92.3	43.5	94.8
9.7	91.3	45.0	96.3
18.8	91.1	46.9	98.2

Propane (C_3H_8) + Abietic acid ($C_{20}H_{30}O_2$)

Hixson and Hixson, 1941

%	f.t.	%	f.t.
1.3	95.7	5.7	70.3
1.5	95.7	6.5	66.0
2.1	92.8	6.6	66.0
2.2	92.8	7.6	60.4
2.6	91.8	7.8	60.4
2.9	90.3	7.8	58.6
2.9	91.5	9.5	29.7
3.0	91.0	9.9	29.7
3.5	80.2	10.0	29.7
3.8	80.2	19.5	96.8
3.9	81.0	19.7	96.8
4.0	80.2	19.9	96.8
4.1	82.2	20.4	91.0
4.3	81.0	20.9	81.0
5.5	70.3	21.0	81.0

Isobutane (C_4H_{10}) + Oleic acid

Hixson and Bockelmann, 1942

Soluble until at least 135°

Pentane (C_5H_{12}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Sat.t.
0	36.15	
10	34.2	Az
100	100.75	28

Isopentane (C_5H_{12}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	
0	27.95	
4	27.2	Az
100	100.75	

Konvaloff, 1907

%	p	%	p
18.1°			
0	542.8	65.87	344.5
27.46	473.3	73.45	300.0
33.78	456.9	100	0
48.91	412.6		

Isopentane (C_5H_{12}) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Konvaloff, 1903 - 1907

mol%	p	mol%	p
0°		18.1°	
0	264.9	0	532.3
25.05	247.5	32.80	505.3
48.82	246.0	49.04	494.3
65.34	243.6	65.60	484.3
78.01	233.6	78.70	454.1
		79.50	445.3

C.S.T. is lower than 0°

Hexane (C ₆ H ₁₄) + Formic acid (CH ₂ O ₂)							
Lecat, 1949							
%		b. t.					
0		68.8					
28		60.5 Az					
100		100.75					
Hexane (C ₆ H ₁₄) + Acetic acid (C ₂ H ₄ O ₂)							
Lecat, 1949							
%		b. t.		Dt mix			
0		68.8					
5		67.5 Az					
10		-		-1.2			
100		118.1					
Kurtyka, 1955 (fig.)							
%		b. t.		%		b. t.	
0		68.60		60		76	
6.0 Az		68.25		80		86	
20		68.6		90		99	
40		70		100		118.05	
Bingham, 1907							
C.S.T. = -15°							
Piercy and Lamb, 1956							
mol%		sound velocity					
		(m/sec.)					
25°							
10.5		1068					
36.7		1059					

Hexane (C ₆ H ₁₄) + Propionic acid (C ₃ H ₆ O ₂)			
Dunken, 1943 (fig.)			
mol%		Dv (cc/mole)	
15		0.25	
30		0.44	
43		0.49	
74.5		0.375	
90		0.24	
Hexane (C ₆ H ₁₄) + 1-Methyl caproic acid		(C ₇ H ₁₄ O ₂)	
Rule, Smith and Harrower, 1933			
mol%		(α) mol	
		54.61	
20°			
4.5		+33.7	
7.9		33.6	
17.3		33.5	
34.4		32.85	
53.6		32.69	
71.9		32.44	
100		32.17	
Hexane (C ₆ H ₁₄) + Caprylic acid (C ₈ H ₁₆ O ₂)			
Hoerr and Harwood, 1951			
f. t.		%	
-20.0		12.8	
-10.0		29.8	
0.0		57.6	
+10.0		96.3	
Hexane (C ₆ H ₁₄) + Pelargonic acid (C ₉ H ₁₈ O ₂)			
Hoerr and Harwood, 1951			
f. t.		%	
-20.0		20.1	
-10.0		42.6	
0.0		71.4	
+10.0		86.5	

Hexane (C_6H_{14}) + Capric acid ($C_{10}H_{20}O_2$)

Hoerr and Harwood, 1951

f. t.	%
-20.0	2.1
-10.0	6.3
0.0	19.2
+10.0	44.8
20.0	74.4
30.0	98.1

Hexane (C_6H_{14}) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Harwood, 1951

f. t.	%
-20.0	0.2
-10.0	1.5
0.0	4.7
10.0	12.8
20.0	32.3
30.0	65.9
40.0	93.5

Hexane (C_6H_{14}) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr and Harwood, 1951

f. t.	%
-10.0	0.1
0.0	1.2
10.0	3.9
20.0	10.6
30.0	29.5
40.0	66.4
50.0	94.3

Hexane (C_6H_{14}) + Pentadecanoic acid ($C_{15}H_{30}O_2$)

Hoerr and Harwood, 1951

f. t.	%
0.0	0.5
10.0	2.8
20.0	12.3
30.0	37.6
40.0	74.3
50.0	96.7

Hexane (C_6H_{14}) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr and Harwood, 1951

f. t.	%
10.0	0.5
20.0	2.9
30.0	12.7
40.0	38.4
50.0	70.5
60.0	95.5

Hexane (C_6H_{14}) + Margaric acid ($C_{17}H_{34}O_2$)

Hoerr and Harwood, 1951

f. t.	%
10.0	0.2
20.0	2.8
30.0	14.8
40.0	42.2
50.0	75.0
60.0	98.7

Hexane (C_6H_{14}) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr and Harwood, 1951

f. t.	%
20.0	0.5
30.0	4.1
40.0	16.0
50.0	44.2
60.0	75.2

Hexane (C_6H_{14}) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

f. t.	%
-40.0	0.1
-30.0	1.2
-20.0	8.3
-10.0	30.7
0.0	61.5
10.0	87.8

Hexane (C_6H_{14}) + Linoleic acid ($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

f. t.	%
-50	2.9
-40	12.5
-30	34.6
-20	63.0
-10	90.8

 Diisopropyl (C_6H_{14}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	58.0
22	52.5 Az
100	100.75

 Heptane (C_7H_{16}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	98.4
43.5	78.2 Az
100	100.75

 Heptane (C_7H_{16}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.	D t mix
0	98.4	
32	92.3 Az	
50	-	
100	118.1	-2.8

Kurtyka, 1955 (fig.)

%	b. t.	%	b. t.
0	98.25	60	93
20	92	80	99
33.0 Az	91.72	90	107.5
40	91	100	118.05

Zieborak, 1955 and Zieborak and Zieborakowa, 1955

Az 33.0 %	91.8°
30.5	91.9

 Heptane (C_7H_{16}) + o-Hydroxybenzoic acid ($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	159.0	20.15	134.3
81.4	149.5	10.25	124.7
60.2	145.5	5.37	112.4
41.6	142.0	2.09	92.2

 Heptane (C_7H_{16}) + 1,2,3-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	167.0	24.77	132.9
88.95	154.3	9.95	119.0
70.04	146.6	4.86	101.0
52.03	141.9	1.89	81.0
47.63	140.9		

 Heptane (C_7H_{16}) + 1,2,4-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	177.8	20.15	147.1
79.29	166.7	10.00	135.6
61.03	16.2	4.51	166.7
36.28	156.6	2.12	100.6

Heptane (C_7H_{16}) + 1,2,5-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	152.5	30.38	131.1
89.9	145.9	10.42	116.2
69.9	138.7	4.59	97.1
50.9	135.5	1.84	79.0

Heptane (C_7H_{16}) + O-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	140.3	12.55	112.8
88.68	134.7	10.42	108.8
68.76	129.8	4.61	94.8
51.90	128.0	2.57	79.0
36.89	126.0		

Heptane (C_7H_{16}) + m-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	154.5	30.60	128.1
89.82	147.7	9.98	105.8
70.05	140.1	4.48	89.6
50.06	134.2	1.92	72.2

Heptane (C_7H_{16}) + p-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	241.5	10.09	180.9
76.86	227.6	4.96	165.3
51.30	218.3	1.69	136.1
31.23	207.2		

Octane (C_8H_{18}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	
0	125.75	
55	90.5	Az
100	200.75	

Octane (C_8H_{18}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	125.75	
50	109.0	
100	118.1	-2.7

Kurtyka, 1955 (fig.)

%	b. t.
0	125.30
20	109
40	106
53.0 Az	105.70
80	107
100	118.05

Octane (C_8H_{18}) (b. t. = 125.75) + Acids

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
Propionic acid	$C_3H_6O_2$	141.3	30	121.5
Butyric acid	$C_4H_8O_2$	164.0	15	124.5
Isobutyric acid	$C_4H_8O_2$	154.6	18	124.0

Diisobutyl (C_4H_{10}) (b.t. = 109.4) + Acids

Lecat, 1949

2nd Comp.			Az		
Acid	Formula	b.t.	%	b.t.	Dt mix
Formic	CH_2O_2	100.75	48	83.2	-
Acetic	$C_2H_4O_2$	118.1	45	100.5	-2.8 (50%)
Propionic	$C_3H_6O_2$	141.3	8	108.0	-2.0 (50%)

Nonane (C_9H_{20}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	150.7
-	112.6 Az
100	118.1

Zieborak, 1955

Az : 69.0 % (82.5 mol %) 113.0°

Kurtyka, 1955 (fig.)

%	b.t.	%	b.t.
0	150.20	60	112
10	124	69.0 Az	112.80
20	113	80	113
40	113	100	118.05

Methyl-2-octane (C_9H_{20}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	135.2
-	108.8 Az
100	118.1

Decane ($C_{10}H_{22}$) + Acetic acid ($C_2H_4O_2$)

Zieborak, 1955

Az : 95 % 117.85°

Kurtyka, 1955 (fig.)

%	b.t.	%	b.t.
0	173.30	60	117
10	138	79.5 Az	116.75
20	125	100	118.05
40	118.5		

Decane ($C_{10}H_{22}$) (b.t. = 173.3) + Acids

Lecat, 1949

2nd Comp.			Az		
Acid	Formula	b.t.	%	b.t.	
Propionic	$C_3H_6O_2$	141.3	95	140.5	
Isobutyric	$C_4H_8O_2$	154.6	72	151.2	
Monochlor-acetic	$C_2H_3O_2Cl$	189.35	42	165.2	
Isovaleric	$C_5H_{10}O_2$	176.5	33	167.0	

Decane ($C_{10}H_{22}$) + Valeric acid ($C_5H_{10}O_2$)

Bingham, 1907

C.S.T. = -20°

Diisoamyl ($C_{10}H_{22}$) (b.t. = 160.2) + Acids

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix.
Formic acid	CH_2O_2	200.75	93	98.5	-
Acetic acid	$C_2H_4O_2$	118.1	94	117.0	-0.8 (95%)
Propionic acid	$C_3H_6O_2$	141.3	67	138.0	-1.0 (80%)
Butyric acid	$C_4H_8O_2$	164.0	33	152.5	-2.0 (30%)
Isobutyric acid	$C_4H_8O_2$	154.6	45	148.0	-2.2 (50%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	20	158.0	-1.2
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	28	155.7	-

Undecane ($C_{11}H_{24}$) + Acetic acid ($C_2H_4O_2$)

Kurtyka, 1955 (fig.)

%	b.t.	%	b.t.
0	193.85	60	118.5
10	146	80	118
20	128	95.0 Az	117.72
40	119.5	100	118.05

Tridecane ($C_{13}H_{28}$) + Heptanoic acid ($C_7H_{14}O_2$)

Lecat, 1949

%	b.t.	
0	234.0	
55	219.2	Az
100	222.0	

Heptadecane ($C_{17}H_{36}$) + Palmitic acid ($C_{16}H_{32}O_2$)

Ralston and Hoerr, 1945 (fig.)

%	f.t.	%	f.t.
100	62.5	40	51
90	62	30	47
80	60	20	44
70	57.5	10	36
60	55.5	0	22
50	54		

Pentatriacontane ($C_{35}H_{72}$) + Apocholic acid
($C_{24}H_{38}O_4$)

Rheinboldt, 1939

%	E	f.t.	%	E	f.t.
0.0	73.0	73.5	60.0	72.0	193.5
7.7	71.5	191.0	60.0	71.0	194.2
7.7	70.5	193.0	71.5	74.0	194.0
19.9	72.0	193.0	71.5	75.0	194.2
20.0	71.0	194.0	80.1	130.0	194.0
30.0	72.0	193.5	80.1	128.0	194.3
30.0	71.0	194.0	85.0	179.0	194.0
39.9	71.0	194.0	85.0	175.5	194.5
40.0	72.0	193.5	89.8	169.0	194.0
49.9	71.0	194.2	95.0	168.0	192.0
50.0	72.0	193.5	100.0	169.5	172.0

Pentatriacontane ($C_{35}H_{72}$) + Desoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1939

%	m.t.	f.t.	%	m.t.	f.t.
0	73.0	73.5	90.0	178.0	201.5
10.0	72.0	201.5	93.0	168.5	201.5
70.0	72.5	201.5	95.0	168.5	201.5
80.0	117.0	201.5	100.0	169.5	172.0
85.0	173.0	201.5			

Triteiracontane ($C_{43}H_{88}$) + Desoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1939

%	m.t.	f.t.	%	m.t.	f.t.
0.0	83.0	84.5	80.0	178.0	201.0
10.0	82.5	201.0	81.6	185.0	201.0
20.0	82.5	201.0	85.0	189.0	201.0
25.0	82.5	201.0	90.0	169.0	201.0
50.9	82.5	201.0	95.0	168.5	201.0
60.0	83.0	201.0	100.0	169.5	172.0
69.9	83.5	201.0			

Triteiracontane ($C_{43}H_{88}$) + Apocholic acid
($C_{24}H_{38}O_4$)

Rheinboldt, 1939

%	m.t.	f.t.	%	m.t.	f.t.
0.0	83.5	84.5	70.0	84.0	195.0
5.8	80.5	184.5	75.2	113.5	195.0
9.7	81.0	191.5	80.0	156.0	194.5
10.0	80.5	188.5	80.1	155.0	195.3
14.6	81.0	193.0	85.0	184.0	194.0
21.2	81.0	194.2	85.0	177.0	195.0
35.2	81.0	194.5	89.9	169.0	194.5
49.6	81.0	194.5	90.0	169.0	193.5
49.6	81.5	194.0	95.0	168.0	194.0
59.6	81.0	194.7	100.0	169.5	172.0

Paraffin + Acetic acid ($C_2H_4O_2$)

Bingham, 1907

C.S.T. = 200°

Trimethylethylene (C_5H_{10}) + Formic acid
(CH_2O_2)

Lecat, 1949

%	b.t.
0	37.1
10	35.2 Az
100	100.75

 Isopropylethylene (C_5H_{10}) + Formic acid
(CH_2O_2)

Lecat, 1949

%	b.t.
0	20.6
2	20.3 Az
100	100.75

 Cyclopentane (C_5H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	49.3
18	46.0 Az
100	100.75

 Diallyl (C_6H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	60.1
-	54.5 Az
100	100.75

 Methylcyclopentane (C_6H_{12}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	72.0
29	63.3 Az
100	100.75

 Cyclohexane (C_6H_{12}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	80.75
33	69.5 Az
100	100.75

 Cyclohexane (C_6H_{12}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Di mix
0	80.75	
9	79.7 Az	
10	-	-1.0
100	118.1	

Jones, 1923

%	sat.t.
34.5	+1.0
42.3	+3.2
54.6	+4.2 C.S.T.
63.03	+2.8
76.0	-2.8

Angelescu and Giusca, 1942

%	sat.t.	%	sat.t.
11.27	2.6	33.09	9.6
13.03	3.9	37.76	9.9
16.76	6.2	42.89	9.9
19.17	7.1	44.10	9.4
23.54	8.2	45.21	8.9
27.74	8.5	46.42	8.4

Baud, 1913

%	f.t.	%	f.t.
100	16.7	54.97	10.9
93.07	14.2	50.32	10.9
79.34	11.9	40.13	10.7
69.16	11.15	25.21	9.8
62.63	10.9	11.84	5.6
61.21	11.05		

Baud, 1913 and 1915		Cyclohexane (C_6H_{12}) + Lauric acid ($C_{12}H_{24}O_2$)	
mol%	Q mix	f. t.	%
39.0	-3045	3.2	6.8 E
58.8	3810	10.0	16.5
70.1	3380	20.0	40.5
78.3	3642	30.0	68.3
82.4	3436	40.0	92.9
87.1	2860	43.92	100
90.4	2350		
Cyclohexane (C_6H_{12}) + Caprylic acid ($C_8H_{16}O_2$)		Cyclohexane (C_6H_{12}) + Tridecanoic acid ($C_{13}H_{26}O_2$)	
Hoerr and Ralston, 1944		Hoerr and Ralston, 1944	
f. t.	%	f. t.	%
-14.0	22.0 E	1.9	8.6 E
+10.0	87.0	10.0	23.4
16.30	100.0	20.0	50.0
		30.0	76.8
		40.0	98.8
		41.76	100
Cyclohexane (C_6H_{12}) + Nonanoic acid ($C_9H_{18}O_2$)		Cyclohexane (C_6H_{12}) + Myristic acid ($C_{14}H_{28}O_2$)	
Hoerr and Ralston, 1944		Hoerr and Ralston, 1944	
f. t.	%	f. t.	%
-17.5	23.9 E	5.6	2.4 E
+10.0	95.1	10.0	5.0
12.25	100.0	20.0	17.7
		30.0	41.9
		40.0	68.5
		50.0	92.9
		54.15	100
Cyclohexane (C_6H_{12}) + Caprinic acid ($C_{10}H_{20}O_2$)		Cyclohexane (C_6H_{12}) + Pentadecanoic acid ($C_{15}H_{30}O_2$)	
Hoerr and Ralston, 1944		Hoerr and Ralston, 1944	
f. t.	%	f. t.	%
-3.2	14.1 E	5.4	2.9 E
+10.0	50.7	10.0	6.4
20.0	77.4	20.0	21.3
30.0	98.7	30.0	46.8
31.24	100.0	40.0	73.5
		50.0	96.1
		52.54	100
Cyclohexane (C_6H_{12}) + Undecanoic acid ($C_{11}H_{22}O_2$)			
Hoerr and Ralston, 1944			
f. t.	%		
-5.9	16.2 E		
+10.0	60.0		
20.0	84.0		
28.13	100.0		

Cyclohexane (C_6H_{12}) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

f.t.	%	
6.4	0.4	E
10.0	0.9	
20.0	6.1	
30.0	21.5	
40.0	47.9	
50.0	74.0	
60.0	96.2	
62.82	100	

Cyclohexane (C_6H_{12}) + Margaric acid ($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

f.t.	%	
6.3	0.7	E
10.0	1.5	
20.0	7.8	
30.0	25.4	
40.0	52.0	
50.0	78.5	
60.0	98.7	
60.94	100	

Cyclohexane (C_6H_{12}) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr and Ralston, 1944

f.t.	%	
6.6	0.1	E
10.0	0.2	
20.0	2.4	
30.0	9.5	
40.0	30.0	
50.0	57.1	
60.0	81.8	
69.32	100	

Cyclohexane (C_6H_{12}) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

f.t.	%	
-12.1	38.9	E
-10.0	44.4	
0.0	70.0	
10.0	89.7	

Cyclohexane (C_6H_{12}) + Linoleic acid ($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

f.t.	%	
-28.3	51.8	E
-20.0	73.3	
-10.0	92.3	

Methylcyclohexane (C_7H_{14}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	
0	101.15	
46	81.0	Az
100	100.75	

Methylcyclohexane (C_7H_{14}) + Acetic acidLecat, 1949 ($C_2H_4O_2$)

%	b.t.	Dt mix
0	101.15	
32	95.2	Az
50		
100	118.1	-2.6

Methylcyclohexane (C_7H_{14}) + Chloracetic acid($C_2H_3O_2Cl$)

Francis, 1944

C.S.T. = 98°

Ethylcyclohexane (C_8H_{16}) + Acetic acid($C_2H_4O_2$)

Lecat, 1949

%	b.t.	
0	131.8	
-	107.9	Az
100	128.1	

1,3-Dimethylcyclohexane (C_8H_{16}) (b.t. = 120.7) +
Lecat, 1949 Acids

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH_2O_2	100.75	51	89.0	-
Acetic acid	$C_2H_4O_2$	118.1	45	109.0	-2.5
					(50%)
Propionic acid	$C_3H_6O_2$	141.3	18	118.2	-0.5
					(90%)
Isobutyric acid	$C_4H_8O_2$	154.6	10	120.2	-

Cyclohexene (C_6H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	82.75
34	71.5 Az
100	100.75

Cyclohexene (C_6H_{10}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Dt mix
0	82.75	
5	81.6 Az	-0.5
100	118.1	

1,3-Cyclohexadiene (C_6H_8) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	80.4
2	80.0 Az
100	118.1

1,4-Cyclohexadiene (C_6H_8) + Acetic acid
Lecat, 1949 ($C_2H_4O_2$)

%	b.t.
0	85.6
6	84.0 Az
100	118.1

Decaline ($C_{10}H_{18}$) + o-Nitrobenzoic acid
Francis, 1944 ($C_7H_5O_4N$)
C.S.T. = 218

Isopropyltetraline ($C_{13}H_{18}$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Francis, 1944

C.S.T. = 132

Nononaphthene (C_9H_{18}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	136.7
-	109.6 Az
100	118.1

Limonene ($C_{10}H_{16}$) (b.t. = 177.7) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	56	160.9	-0.5
					(50%)
Isobutyric acid	$C_4H_8O_2$	154.6	75	153.0	-0.8
Valeric acid	$C_5H_{10}O_2$	186.35	27	173.4	-0.3
					(20%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	41	169.0	-0.2
					(50%)
Caproic acid	$C_6H_{12}O_2$	205.15	5	177.0	-0.1
					(5%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	10	176.5	-0.2
					(5%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	34	167.8	-

1-Terpinene (C ₁₀ H ₁₆) (b.t. = 173.4) + Acids						Terpinolene (C ₁₀ H ₁₆) (b.t. = 184.6) + Acids					
Lecat, 1949						Lecat, 1949					
2nd Comp.		Az				2nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix	Name	Formula	b.t.	%	b.t.	
Propionic acid	C ₃ H ₆ O ₂	141.3	97	141.2	-0.2 (95%)	Butyric acid	C ₄ H ₈ O ₂	164.0	72	162.5	
Butyric acid	C ₄ H ₈ O ₂	164.0	48	160.65	-	Valeric acid	C ₅ H ₁₀ O ₂	186.35	35	178.0	
Isobutyric acid	C ₄ H ₈ O ₂	154.6	70	152.0	-0.7 (70%)	Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	52	171.5	
Valeric acid	C ₅ H ₁₀ O ₂	186.35	20	171.0	-0.2 (20%)	Monochlor acetic acid	C ₂ H ₃ O ₂ Cl	189.35	-	172.2	
Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	32	168.0	-						
Monochlor acetic acid	C ₂ H ₃ O ₂ Cl	189.35	-	166.0	-						
						Camphene (C ₁₀ H ₁₆) (b.t. = 159.6) + Acids					
						Lecat, 1949					
2nd Comp.		Az				2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.	Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Acetic acid	C ₂ H ₄ O ₂	118.1	97	117.8	-	Acetic acid	C ₂ H ₄ O ₂	118.1	97	117.8	-
Propionic acid	C ₃ H ₆ O ₂	141.3	65	138.0	-	Propionic acid	C ₃ H ₆ O ₂	141.3	65	138.0	-
Butyric acid	C ₄ H ₈ O ₂	164.0	28	152.3	-15 (28%)	Butyric acid	C ₄ H ₈ O ₂	164.0	28	152.3	-15 (28%)
Isobutyric acid	C ₄ H ₈ O ₂	154.6	44	147.8	-	Isobutyric acid	C ₄ H ₈ O ₂	154.6	44	147.8	-
Valeric acid	C ₅ H ₁₀ O ₂	186.35	8	158.5	-	Valeric acid	C ₅ H ₁₀ O ₂	186.35	8	158.5	-
Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	17	156.5	-	Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	17	156.5	-
Monochlor acetic acid	C ₂ H ₃ O ₂ Cl	189.35	15	154.8	48 (15%)	Monochlor acetic acid	C ₂ H ₃ O ₂ Cl	189.35	15	154.8	48 (15%)
3-Terpinene (C ₁₀ H ₁₆) + Isovaleric acid (C ₅ H ₁₀ O ₂)											
Lecat, 1949											
		Az									
% b.t.						% b.t.					
0 183						0 183					
47 172.5		Az				47 172.5		Az			
100 176.5						100 176.5					
3-Terpinene (C ₁₀ H ₁₆) + Valeric acid (C ₅ H ₁₀ O ₂)											
Lecat, 1949											
% b.t.						% b.t.					
0 183						0 183					
33 178.5		Az				33 178.5		Az			
100 186.35						100 186.35					

Camphene ($C_{10}H_{16}$) + Trichloroacetic acid
($C_2H_2Cl_3$)

Brooks and Humphrey, 1918 (fig.)

%	f. t.	%	f. t.
100	+55	40	-57
90	+43	30	-23
80	+25	20	+5
70	-10	10	+23
68	-78	0	+50

Turpentine 1 ($C_{10}H_{16}$) + Acetic acid ($C_2H_4O_2$)

Landolt, 1878

%	d	(α) _D
20°		
0	0.8629	37.01
9.8364	0.87565	37.148
21.9342	0.89166	37.406
35.1390	0.91163	37.885
49.0263	0.93530	38.427
77.0384	0.99183	39.672
90.1586	1.02330	40.222
100	1.0502	-

Turpentine ($C_{10}H_{16}$) + Acetic acid ($C_2H_4O_2$)

Rimbach, 1892

%	d	(α) _D
20°		
0	0.8648	34.809
37.648	0.9156	35.372
50.052	0.9368	35.678
71.012	0.9772	36.539
82.954	1.0084	36.976
85.307	1.0092	37.004
90.706	1.0226	37.584
100	1.0476	-

Turpentine ($C_{10}H_{16}$) + Abietic acid ($C_{20}H_{30}O_2$)

Vézes, 1910

%	b. t.	%	b. t.
0	157.9	33.29	168.0
6.28	158.9	34.93	169.8
10.47	159.5	36.79	171.4
16.67	160.7	38.27	172.8
19.81	161.4	39.17	174.4
22.66	162.2	40.16	176.4
26.67	163.6	41.18	179.0
29.08	165.4	42.23	182.0
30.36	166.1	43.34	185.7
31.74	166.7		

1-Pinene ($C_{10}H_{16}$) (b. t. = 155.8) +
Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Formic acid	CH_2O_2	100.75	98.5	118.2	-
Acetic acid	$C_2H_4O_2$	118.1	90	117.0	-1.1 (90%)
Propionic acid	$C_3H_6O_2$	141.3	58.5	136.3	-2.0 (45%)
Butyric acid	$C_4H_8O_2$	164.0	28	150.2	-1.2 (26%)
Isobutyric acid	$C_4H_8O_2$	154.6	37	146.8	-1.4 (30%)
Valeric acid	$C_5H_{10}O_2$	186.35	5	155.5	-0.6 (10%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	11	154.2	-1.0 (18%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	25	151.6	-

Lecat, 1949

2-Pinene ($C_{10}H_{16}$) (b. t. = 163.8) +
Acids

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propionic acid	$C_3H_6O_2$	141.3	76	139.0	-1.8 (75%)
Butyric acid	$C_4H_8O_2$	164.0	38	156.0	-1.3 (40%)
Isobutyric acid	$C_4H_8O_2$	154.6	52	149.2	-1.6 (50%)
Valeric acid	$C_5H_{10}O_2$	186.35	10	162.2	-0.5 (10%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	22	160.8	-1.2 (25%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	30	157.6	-

Benzene (C_6H_6) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	
0	80.15	
31	71.05	Az
100	100.75	

Van Bijlert, 1891

%	f. t.	
0	+4.07	
0.9	3.71	
-	$L_1 + L_2$	
94.2	-0.58	
95.8	0.02	
97	0.38	
100	1.37	

Ewins, 1914

%	sat. t.	%	sat. t.
9.2	21.0	45.2	73.0
11.8	39.1	48.9	73.2
14.2	44.2	51.8	73.2
17.5	51.4	54.2	73.4
19.7	56.0	57.2	72.3
21.0	58.4	64.5	70.2
22.2	59.9	69.5	66.2
25.1	64.2	75.6	57.7
31.3	70.1	81.8	41.2
36.9	72.5	81.9	41.0
40.9	73.0	85.8	25.3
43.0	73.2	89.8	3.8

Timmermans and Kohnstamm, 1909 - 1910

C.S.T. = 82.0 dt/dp (5 - 65Kg/cm²) = +0.03Benzene (C_6H_6) + Acetic acid ($C_2H_4O_2$)

Heterogeneous equilibria.

Linebarger, 1895

mol%		P	P ₁	P ₂
L	V			
35.0°				
0	-	146	146	-
6.44	2.45	143.5	140	3.5
15.17	4.74	135.6	129.2	6.4
37.10	8.25	127.5	117.0	10.5
43.99	11.02	119.7	106.5	13.2
49.86	12.26	117.1	103.1	14.0
53.24	13.33	112.5	97.6	14.9
54.65	13.82	112.6	97.3	15.3
56.60	14.62	112.4	96.0	16.4
73.87	20.18	91.1	72.7	18.4
80.00	26.91	81.6	59.3	22.3
100.00	100	26.5	-	26.5
20°				
0	-	75.6	75.6	-
53.24	11.99	55.3	48.7	6.6
80.00	21.97	42.1	33.0	9.1
97.28	64.66	17.6	6.2	11.4
100.00	100	11.7	-	11.7

Zawidzki, 1900

mol%		P	P ₁	P ₂
L	V			
50°				
0	0	267.1	267.1	0
1.70	1.45	265.9	262.3	3.63
4.13	2.80	265.2	258.7	6.53
5.04	3.15	264.4	257.2	7.25
9.96	5.28	261.1	249.6	11.51
13.77	6.72	259.0	244.8	14.2
20.88	9.16	250.2	231.8	18.4
25.35	10.48	245.2	224.7	20.5
35.66	13.30	236.0	211.2	24.8
41.36	15.07	228.0	200.9	27.1
43.65	16.25	224.3	195.6	28.7
65.30	24.15	189.5	153.2	36.3
68.01	25.17	184.0	147.2	36.8
72.42	28.66	175.3	135.1	40.2
88.09	47.97	126.0	75.3	50.7
98.51	86.27	68.0	13.3	54.7
99.49	94.46	59.2	3.5	54.7
100	100	55.4	0	55.4

Mameli, 1903

V	%	L	D b.t.
0.620		0.444	-0.087
0.723		0.518	0.091
0.725		0.536	0.101
1.117		0.996	0.129
1.169		1.044	0.131
1.600		1.610	0.123
1.602		1.620	0.107
1.756		1.817	0.105
1.764		1.843	0.099
1.778		1.892	0.098
2.528		3.009	0.086
2.636		3.153	0.079
2.774		3.433	0.075
3.383		4.519	0.062
4.363		6.417	+0.049
6.002		10.048	0.209
8.974		28.587	0.643
14.799		56.789	2.021

Rosenoff and Easley, 1910

L	mol%	V	b.t.
0		0	80.24
35.49		14.96	84.72
54.61		22.48	88.96
61.96		25.79	90.85
70.07		31.41	93.99
75.03		35.57	96.23
80.77		42.24	99.44
87.28		52.18	103.71
91.09		61.18	106.82
93.53		68.51	109.51

Othmer, 1928

b.t.	L	%	V
758 mm			
115.1	1.2		7.7
109.0	3.6		29.2
100.0	9.4		45.9
91.5	21.4		65.4
85.8	40.2		75.5
82.8	59.7		83.3
80.0	90.7		94.6
79.8	96.1		97.0

Othmer, 1932

L	%	V	L	%	V
at the b.t. 750 mm					
91		94.60	97		97.50
92		94.95	98		98.10
93		95.30	98.5		98.50
94		95.90	99		98.85
95		96.40	99.5		99.25
96		96.95			

Garner, Ellis and Pearce, 1954

t	L	mol%	V
111.2	97.0		84.8
92.3	78.0		43.8
89.3	70.7		37.2
86.5	63.0		31.0
84.7	54.2		27.5
83.3	45.0		22.5
82.1	34.7		18.5
81.1	25.0		14.7

Skirrow, 1902

%	p
25°	
0	95.9
19.17	87.5
33.54	82
67.51	64.5
100	14

Schmidt, 1926

mol%	10°	20°	30°	40°	50°	60°	70°
0	45.8	74.9	113.0	180.5	269.5	395	552
10	49.2	77.2	122.5	196	288.5	414	587
20	50.8	78.8	124.0	200.5	297	429	601
30	50.1	76.2	121.0	195.5	290	426	596
40	48.3	72.6	117.2	183	276	413	573
50	45.4	68.8	111.5	169.0	255	379	537
60	42.4	64.3	104.1	156.5	234.5	351	497
70	35.1	55.8	93.2	139.5	210	311	452
80	29.8	48.5	79.2	121.5	182	268	393
90	22.1	33.6	56.9	91.3	136	210	296
100	7.1	13.8	21.0	37.2	61.2	97.5	148.7

Hovorka and Dreisbach, 1934

mol%	p	P ₁	P ₂
25°			
0	94.91	94.91	0
7.3	93.2	90.4	2.8
9.5	92.74	88.6	4.1
11.4	92.87	87.6	4.5
14.6	91.16	86.0	5.2
17.0	90.8	84.0	6.8
19.7	90.0	82.35	7.65
22.6	88.45	-	-
24.4	88.37	79.7	8.7
27.8	87.5	77.8	9.7
30.2	86.88	76.5	10.4
33.2	85.56	74.7	10.9
36.3	83.85	-	-
38.6	82.94	71.0	11.9
47.4	79.19	-	-
47.9	79.19	66.2	13.0
67.4	79.17	54.2	14.2
74.8	68.38	-	-
78.2	62.65	-	-
87.7	59.46	-	-
96.9	47.54	-	-
100	28.63	0	15.43
	15.43		

Lecat, 1949

%	b. t.	Dt mix
0	80.15	
1.7	80.02	Az
44	-	-1.9
100	118.1	

Beckmann, 1888

%	f. t.
0	+5.44
0.46	5.232
1.18	4.930
2.27	4.470
4.28	3.650
7.55	2.335
13.18	0.150
18.57	-1.860

Hentschel, 1888

%	f. t.	%	f. t.
0	+5.17	95.283	-14.07
0.299	5.045	97.616	15.12
1.299	4.660	98.462	15.49
6.577	2.45	99.018	15.73
22.14	-3.05	100	16.21
91.419	12.44		

Roloff, 1895

%	f. t.	%	f. t.
0	+5.5	0	+5.6
12.3	+0.6	5.1	3.6
20.0	-2.4	9.3	1.9
25.4	4.6	15.2	-0.4
29.3	6.0	20.0	2.3
33.0	7.6	25.1	4.3
35.3	8.4	29.5	6.1
36.4	8.8	32.4	7.2
37.8	8.1	34.5	8.1
39.6	7.4	36.1	8.8 E
40.9	7.0	37.1	9.1
43.8	6.0	38.4	9.6
46.2	4.9		
49.5	3.5		
61.6	1.2	79.8	8.3
64.3	2.3	86.1	10.7
69.0	4.1	94.5	14.0
73.8	6.0	100	16.3
35.0	-9.2	52.8	-2.1
36.6	8.6	54.2	1.8
37.6	8.3	59.0	0.2
38.6	7.7	61.9	1.4
39.9	7.4	64.7	2.3
41.2	6.7	69.2	3.9
42.5	6.4	78.1	7.5
44.7	5.5	84.2	9.7
47.6	4.2	89.2	11.7
49.6	3.4	100	16.2

Dahms, 1905

mol%	f. t.	mol%	f. t.
0	+5.30	49.51	-11.35 -5.5
1.49	4.80	51.55	-4.7
4.39	3.85	66.15	+0.65
11.39	1.62	76.34	4.37
22.70	-1.91	85.62	8.12
28.77	3.89	93.20	11.69
35.74	6.25	98.17	14.29
40.22	7.85	99.329	15.00
42.4	8.60	100	15.41
46.48	-11.35 -5.5		

Rosza, 1911

%	f. t.	%	f. t.
0	5.91	79.770	11.09
0.344	5.74	85.725	11.35
0.420	5.71	87.883	12.16
0.573	5.64	88.954	12.23
1.869	5.05	92.986	13.70
4.810	3.77	93.447	13.92
7.037	2.90	95.086	14.57
8.863	2.21	96.878	15.32
10.720	1.53	97.731	15.63
11.635	1.24	99.119	16.29
12.344	1.01	100	16.72

Anders, 1933

%	f. t.	%	f. t.
0	+5.35	36.312	-7.955
25.222	-4.394	37.612	-7.821
26.673	-4.906	37.727	-9.140
29.283	-5.924	41.017	-5.676
31.826	-6.853	41.520	-5.854
33.661	-7.607	44.548	-4.829
34.200	-7.804	45.451	-4.387
34.461	-7.860	45.937	-3.510
35.256	-7.856	100	+16.55

Giacalone, 1942

%	D f. t.	%	D f. t.
0.75	-0.34	15.54	-6.25
1.64	0.72	18.59	7.34
3.15	1.35	21.27	8.40
5.21	2.20	23.32	9.15
7.48	3.07	25.48	10.09
9.07	3.74	27.78	10.84
10.87	4.36	33.33	12.95
12.44	5.02	35.47	13.87
13.21	5.33	37.26	14.46
14.06	5.70		

Tan, Krieger and Miller, 1952

%	f. t.	%	f. t.
0.0	+5.49	63.9	3.35
3.6	+3.94	65.0	3.75
7.3	+2.32	65.1	3.75
9.3	+1.54	66.7	4.37
13.8	-0.24	67.6	4.50
17.7	1.74	70.8	5.60
22.6	3.55	72.1	6.04
26.0	4.87	72.2	6.12
27.9	5.59	72.8	6.30
28.7	5.88	73.4	6.45
31.0	6.76	74.1	6.72
33.0	7.66	76.2	6.94
34.7	8.20	77.0	7.16
34.9	8.13	78.1	7.25
37.4	7.04	78.4	7.28
38.2	6.78	78.8	7.66
38.7	6.45	80.3	8.17
40.4	5.68	80.6	8.36
41.2	5.13	81.8	8.80
41.7	4.90	82.6	9.14
43.6	4.09	83.6	9.48
44.1	3.96	84.6	9.89
47.2	2.64	84.6	9.92
49.0	1.92	85.9	10.51
50.4	1.42	91.0	12.53
56.7	0.83	96.2	14.62
59.0	+1.63	100.0	16.60
60.8	2.35		

Properties of phases.

Le Blanc, 1889

%	d
	20°
71.06	0.97667
100	1.04954

Buchkremer, 1890

%	d
	20°
0	0.87953
20.258	0.9043
32.368	0.9204
40.095	0.9320
50.012	0.9475
59.998	0.9649
70.118	0.9847
89.982	1.0260
100	1.0505

Humburg, 1893

%	d
	16°
0	0.88422
10.7985	0.8951
19.823	0.9062
31.317	0.9221
100	1.0557

Friedländer, 1901

%	d
	24.65°
99.85	1.0454
57.49	0.9532
32.64	0.9137
0	0.8733

Polowzow, 1910

%	d
	17.5°
0.035	0.881356
0.35	0.883853
1.75	0.89469
8.77	0.956190
100	1.05272

Hubbard, 1910

% 25°	d	
	25°	50°
0	0.87368	0.86679
11.634	0.88678	0.85938
23.614	0.90152	0.87387
34.008	0.91580	0.88784
44.857	0.93197	0.90385
54.459	0.94743	0.91934
63.968	0.96439	0.93613
73.819	0.98341	0.95516
82.321	1.00142	0.97299
91.338	1.02321	0.99380
100	1.04390	1.01560

Goerdts, 1911

% 18.0°	d	
	18.0°	
0.000	0.880662	
10.729	0.890656	
23.320	0.908266	
51.071	0.948915	
69.531	0.981582	
100.00	1.051860	

Muchin, 1913

% 20°	d	
	20°	
0	-	
86.6	1.0250	
95.26	1.0409	
97.39	1.0452	
99.06	1.0496	
99.48	1.0504	
99.77	1.0512	
100	1.0532	

Hammick and Andrew, 1929

mol% 25°	d	
	25°	
27.9	0.9005	
51.0	0.9329	
82.0	0.9965	
100	1.051	

Briegleb, 1930

mol% 22°	d	
	22°	
93.07	1.0272	
87.36	1.0106	
66.22	0.9600	
50.19	0.9305	
37.56	0.9140	
28.11	0.9033	
22.84	0.8975	
19.43	0.8941	
16.37	0.8912	
13.00	0.8880	

Smyth and Rogers, 1930

t 0	d			
	0	9.78	23.05	43.72
	mol%			
0	0.8986	0.9100	0.9222	0.9484
10	0.8896	0.8989	0.9113	0.9369
20	0.8786	0.8879	0.9006	0.9257
30	0.8682	0.8768	0.8901	0.9144
40	0.8574	0.8657	0.8796	0.9032
50	0.8466	0.8546	0.8658	0.8920
60	0.8357	0.8436	0.8582	0.8810
70	0.8246	0.8327	0.8475	0.8698
61.34	79.12	100 mol%		
0	0.9760	1.0134	-	
10	0.9645	1.0020	1.0607	
20	0.9532	0.9904	1.0491	
30	0.9418	0.9788	1.0376	
40	0.9307	0.9675	1.0264	
50	0.9193	0.9562	1.1053	
60	0.9078	0.9448	1.0039	
70	0.8964	0.9333	0.9923	

Rao, 1934

% 30°	d	
	30°	
0	0.878	
19.2	0.896	
37.5	0.920	
51.0	0.942	
70.0	0.978	
86.8	1.010	
100	1.040	

Giacalone, 1942

mol%	d
27°	
4.87	0.9070
3.65	0.8986
2.44	0.8882
1.22	0.8788
0	0.8700

Schmidt, 1926

%	Dv 10 ⁴	%	Dv 10 ⁴
17°			
10	29	60	110
20	60	70	100
30	86	80	71
40	111	90	35
50	120		

Ritzel, 1907

P	π	P	π	P	π
25°					
0 mol%		18.16 mol%		42.23 mol%	
(d = 0.870)		(d = 0.886)		(d = 0.917)	
1	91.5	1	92.5	1	93.2
101	85.2	129	82.6	101	87.5
213	76.5	224	73.4	185	77.5
345.5	71.3	330	69.3	275	76.7
484.5	63.8	445	64.4	400.5	64.6
68.09 mol%		83.09 mol%		100 mol%	
(d = 0.957)		(d = 0.991)		(d = 1.042)	
1	90.6	1	88.0	1	87.5
145	80.3	120.5	80.8	92.5	81.4
251	76.2	231.5	74.8	218.5	72.6
356.5	66.8	341	67.8	357	65.0
453.5	62.2	-	-	494	57.1

Viscosity and surface tension .

Friedlander, 1901

%	η
(water = 1)	
25°	
0	
32.64	0.678
57.49	0.686
99.85	0.776
	1.313

Dunstan, 1905

%	η
25°	
0	597.8
2.75	594.1
10.27	590.7
18.58	596.2
20.75	596.9
51.71	665.8
65.07	834.1
83.26	893.2
100	1194.0

Muchin, 1913

%	η
20°	
0	658
86.6	1010
95.26	1140
97.39	1190
99.06	1230
99.48	1250
99.77	1260
100	1260

Whatmough, 1902

mol%	σ
18°	
0	28.40
20	27.73
40	27.37
50	27.17
60	27.02
80	27.01
100	27.48

Morgan and Scarlett, 1917

%	σ
15°	
0	28.551
55.13	26.849
60.40	26.729
65.20	26.714
100	27.175

%	σ	%	σ
30°			
0	26.625	59.95	24.988
10.27	26.09	61.48	24.969
25.10	25.62	62.90	24.961
38.89	25.30	75.42	25.05
49.77	25.10	100	25.711

Hamrick and Andrew, 1929

mol%	σ
25°	
27.9	28.08
51.0	27.04
82.0	27.78
100	28.52

Belton, 1935

mol%	σ
20°	
0	28.89
25.85	27.79
49.53	27.21
59.66	27.02
69.15	26.90
86.19	26.45
100	27.42
35°	
0	26.91
25.85	25.49
49.53	25.43
59.66	25.32
69.15	25.21
86.19	25.40
100	25.91

Optical and electrical properties .

Le Blanc, 1889

%	n_D
20°	
71.06	1.40822
100	1.37255

Buchkremer, 1890

%	n_D	%	n_D
20°			
0	1.50001	59.998	1.42148
20.258	.47301	70.118	.40872
32.368	.45704	89.982	.38445
40.095	.44693	100	.37265
50.012	.43409		

Zawidzki, 1900

%	n_D	%	n_D
25.2°			
0	1.49797	50.02	1.43151
4.92	.49117	60.03	.41896
9.93	.48438	70.05	.40622
19.73	.47107	80.04	.39382
30.21	.45727	90.03	.38176
40.05	.44436	100	.36994

Hubbard, 1910

%	n			
	C	D	F	G ₁
25°				
0	1.49329	1.49794	1.50985	1.52015
11.634	1.47782	1.48218	1.49323	1.50276
23.614	1.46225	1.46628	1.47644	1.48517
34.008	1.44890	1.45265	1.46208	1.47020
44.857	1.43516	1.43861	1.44724	1.45460
54.459	1.42300	1.42618	1.43414	1.44086
63.968	1.41131	1.41418	1.42150	1.42765
73.819	1.39907	1.40172	1.40827	1.41375
82.321	1.38875	1.39119	1.39712	1.40206
91.338	1.37803	1.38023	1.38552	1.38983
100	1.36779	1.36976	1.37442	1.37818

Briegleb, 1930

mol%	n_F
22°	
13.00	1.4760
16.37	1.4730
19.43	1.4695
22.84	1.4660
28.11	1.4605
37.56	1.4505
50.19	1.4370
66.22	1.4170
87.36	1.3865
93.07	1.3775

Rosanoff and Easley, 1910

mol%	n_D deviation of the linearity
25°	
0	0
10	-3.64
20	6.72
30	9.11
40	11.02
50	12.18
70	11.27
80	9.05
90	5.32
100	0

 n_D benzene = 1.49762 n_D acid = 1.37043 at 25°

Allard and Wenzki, 1934

mol%	r	mol%	r
0.000	13.03	50.061	12.992
5.0476	13.07	85.239	12.998
7.613	13.00	90.361	12.980
13.790	12.99	95.629	12.991
17.538	12.980	100.000	13.002

r = molar refraction of acetic acid.

Smyth and Rogers, 1930

t	ϵ			
0	9.78	23.05	43.72	
mol%				
0	2.236	2.375	2.464	2.706
10	2.315	2.358	2.449	2.700
20	2.295	2.340	2.434	2.693
30	2.274	2.322	2.418	2.687
40	2.253	2.303	2.403	2.679
50	2.232	2.285	2.388	2.672
60	2.210	2.266	2.372	2.663
70	2.188	2.246	2.357	2.655
61.34	79.12	100		
0	3.113	3.956	-	
10	3.118	3.981	6.074	
20	3.124	4.007	6.13	
30	3.130	4.032	6.20	
40	3.133	4.052	6.27	
50	3.132	4.067	6.36	
60	3.129	4.078	6.47	
70	3.126	4.084	6.60	

Briegleb, 1930

mol%	ϵ
22°	
13.00	2.370
16.37	2.397
19.43	2.420
22.84	2.455
28.11	2.519
37.56	2.713
50.19	3.070
66.22	3.969
87.36	6.684
93.07	7.745

Humburg, 1893

%	(α) mol magn
16°	
100	2.4746
31.317	2.5178
19.823	2.517
10.7985	2.4688

Smith and Smith, 1918

%	χ
20°	
0	-0.691
17.7	0.660
40.9	0.626
61.3	0.588
79.7	0.554
100	0.520

Rao, 1934

%	χ
30°	
0	-0.705
19.2	0.668
37.5	0.636
51.0	0.608
70.0	0.574
86.8	0.546
100	0.520

Heat constants

Timofeev, 1905

% U	
20°	
0	0.4233
30.2	0.430
36.6	0.457
82.5	0.471
100	0.487
Q dil	
initial	final (mole benzene)
42.6	40.9 - 79.3
74.9	71.0 191
78.8	74.9 212
82.8	78.8 239
88.1	82.8 278
93.8	88.1 323
100	93.8 467
(mole acid)	
0	6.65 - 337
0	9.06 300
9.06	16.7 211
16.7	23.6 199
23.6	29.5 154
29.5	34.1 151
39.4	42.6 122
54.4	56.6 73

Schmidt, 1926

%	Q mix (cal/g)	%	Q mix (cal/g)
16°			
10	-0.57	60	-1.36
20	0.88	70	1.21
30	1.15	80	0.94
40	1.32	90	0.57
50	1.43		

Benzene (C₆H₆) + Propionic acid (C₃H₆O₂)

Mameli, 1903

% D b. t.		% D b. t.	
V	L	V	L
0.166	0.310	+0.013	0.792
0.178	0.382	0.045	0.819
0.184	0.429	0.051	0.900
0.367	0.926	0.105	1.411
0.384	1.289	0.126	1.578
0.401	1.386	0.135	1.641
0.485	1.775	0.156	1.843
0.574	2.672	0.289	2.207
0.788	3.556	0.392	3.043
			30.870
			+0.470
			0.568
			0.728
			1.074
			1.287
			1.482
			1.766
			2.230
			-

Paterno, 1889

%	f. t.
0	5.5
1.34	5.0
3.01	4.395
6.66	3.095
7.42	2.795
12.91	+0.735
15.02	-0.09

Giacalone, 1942

%	D f. t.	%	D f. t.
0.79	-0.30	24.38	-9.51
2.80	1.04	27.17	10.70
5.98	2.19	31.94	13.08
9.80	3.58	34.42	14.46
12.40	4.58	36.25	15.46
15.60	5.82	38.58	16.63
18.33	6.93	40.83	17.77
21.64	8.30	44.29	19.77

Humburg, 1893

%	(α) mol magn
16°	
100	3.4833
37.2596	3.5069
15.0319	3.4717

Briegleb, 1930

mol%	d	mol%	d
22°			
7.85	0.8867	23.18	0.8997
10.93	0.8893	24.90	0.9010
12.08	0.8904	32.99	0.9080
14.91	0.8926	44.23	0.9180
15.82	0.8930	64.37	0.9395
19.23	0.8965	83.24	0.9662
		91.90	0.9810

Giacalone, 1942

mol%	σ
27°	
4.97	26.68
3.65	26.79
2.44	27.02
1.22	27.33
0	27.95

Briegleb, 1930

mol%	n_D	ϵ
22°		
7.85	2.310	1.4806
10.93	2.326	1.4775
12.08	2.330	1.4759
14.91	2.345	1.4730
15.82	2.350	1.4720
19.23	2.365	1.4680
23.18	2.386	1.4640
24.90	2.390	1.4620
32.99	2.442	1.4585
44.23	2.530	1.4412
64.37	2.764	1.4200
83.24	3.030	1.4000
91.90	3.170	1.3916

Humburg, 1893

%	(α) mol magn
16°	
100	4.5465
34.1865	4.510
6.0295	4.540

Benzene (C₆H₆) + Butyric acid (C₄H₈O₂)

Weissenberger, Henke and Katschinka, 1926

mol%	p
20°	
0	74.7
25	64.2
40	55.3
50	47.7
60	40.5
75	28.0

Mameli, 1903

%	D b.t.
0.986	+0.150
1.884	0.283
3.458	0.518
5.535	0.809
9.121	1.325
12.881	1.863
20.871	3.010

Giacalone, 1942

%	D f.t.	%	D f.t.
0.96	-0.33	23.15	-8.07
2.98	0.96	25.59	9.14
5.39	1.68	28.43	10.41
7.24	2.31	33.53	12.75
9.81	3.10	36.14	14.21
12.25	3.93	38.00	15.21
14.68	4.82	39.95	16.16
17.00	5.65	41.95	17.51
19.06	6.46	43.65	18.51
21.20	7.26	45.61	19.56

Humburg, 1893

%	d
16°	
0	0.88422
6.0295	0.8866
34.1865	0.9059
100	0.9633

Smyth and Rogers, 1930

mol%	d		
	10°	40°	70°
0	0.8896	0.8574	0.8246
3.79	0.8916	0.8595	0.8270
6.40	0.8933	0.8616	0.8272
8.94	0.8939	0.8636	0.8313
18.75	0.9703	0.9389	0.9119
47.29	0.9026	0.8713	0.8388
71.83	0.9254	0.8933	0.8634
100	0.9435	0.9160	0.8854

Briegleb, 1930

mol%	d	
	22°	
11.27	0.8872	
12.69	0.8884	
16.69	0.8910	
21.26	0.8950	
36.19	0.9020	
33.28	0.9047	
55.09	0.9229	
70.74	0.9350	
92.13	0.9538	

Giacalone, 1942

mol%	d	
	27°	
0	0.8700	
0.96	0.8763	
1.92	0.8832	
2.88	0.8901	
3.86	0.8972	

Jones, Bowden and al., 1948

%	d	%	d
25°			
100	0.9535	20	0.8864
80	0.9345	15	0.8832
60	0.9171	10	0.8797
50	0.9094	5	0.8767
40	0.9013	0	0.8731

Jones, Bowden and al., 1948

%	η	%	η
0	603	40	747
5	612	50	808
10	624	60	903
15	639	80	1100
20	656	100	1466

Giacalone, 1942

mol%	σ	
	27°	
0	27.95	
0.96	27.58	
1.92	27.38	
2.88	27.18	
3.86	27.03	

Briegleb, 1930

mol%	n_D	
	22°	
11.27	1.4762	
12.69	1.4745	
16.69	1.4703	
21.26	1.4655	
36.19	1.4560	
33.28	1.4530	
55.09	1.4325	
70.74	1.4187	
92.13	1.3997	

Smyth and Rogers, 1930

mol%	ϵ		
	10°	40°	70°
0	2.315	2.253	2.188
3.79	2.301	2.266	2.203
6.40	2.333	2.280	2.219
8.94	2.342	2.290	2.231
18.75	2.388	2.340	2.291
47.29	2.542	2.519	2.500
71.83	2.705	2.715	2.725
100	2.932	3.001	3.074

Briegleb, 1930

mol %	ϵ
22°	
11.27	2.334
12.59	2.338
16.69	2.360
21.26	2.384
36.19	2.430
33.28	2.446
55.09	2.590
70.74	2.700
92.13	2.850

Benzene (C_6H_6) + Isobutyric acid ($C_4H_8O_2$)

Paterno and Montemartini, 1894

%	d
18.46°	
0	0.88023
19.245	0.89069
100	0.95069

Benzene (C_6H_6) + Valeric acid ($C_5H_{10}O_2$)

Giacalone, 1942

%	D f.t.
1.27	- 0.37
3.72	- 1.04
7.00	- 1.96
12.19	- 3.43
16.79	- 4.87
20.34	- 6.10
23.77	- 7.26
27.18	- 8.65
30.40	- 9.93
36.73	-12.94
38.70	-13.87
41.60	-15.30
44.11	-16.78
46.56	-18.12
49.53	-19.98

Jones, Bowden and al., 1948

%	d
25°	
0	0.8731
5	.8753
10	.8779
15	.8802
20	.8828
40	.8943
50	.9010
60	.9072
80	.9203
100	.9344

%	η
25°	
0	603
5	620
10	639
15	662
20	687
40	825
50	920
60	1062
80	1436
100	1970

Benzene (C_6H_6) + Isovaleric acid ($C_5H_{10}O_2$)

Briegleb, 1930

mol%	d	n_D	ϵ
22°			
7.29	0.8830	1.4805	2.314
8.95	0.8836	1.4786	2.332
11.45	0.8852	1.4755	2.331
15.32	0.8874	1.4710	2.343
18.71	0.8892	1.4674	2.356
26.76	0.8935	1.4590	2.393
34.55	0.8973	1.4510	2.425
53.26	0.9075	1.4330	2.524
74.79	0.9185	1.4154	2.648
92.90	0.9280	1.4005	2.753

Benzene (C_6H_6) + Caproic acid ($C_6H_{12}O_2$)

Paterno, 1889

%	f.t.
0	5.5
1.04	5.235
1.66	5.095
4.33	4.45
10.33	2.935
11.83	2.52
14.01	1.90

Giacalone, 1942

%	D f.t.	%	D f.t.
0.28	-0.10	20.63	-5.74
0.86	0.24	25.07	7.26
1.80	0.49	29.33	8.89
3.59	0.49	33.06	10.44
5.21	1.35	38.22	12.87
8.61	2.22	42.37	15.04
11.69	3.05	44.81	16.44
14.49	3.84	47.09	17.80
18.03	4.92	49.59	19.55

Jones, Bowden and al., 1948

%	d	η
	25°	
0	0.8731	603
5	0.8749	626
10	0.8769	653
15	0.8789	684
20	0.8809	718
40	0.8902	908
50	0.8950	1058
60	0.9003	1284
80	0.9116	1844
100	0.9238	2814

Zochowski, 1936 and

Hrynakowski and Zochowski, 1937

%	d	ϵ
	71.0°	
0.000	0.8261	2.180
5.043	0.8282	2.187
10.185	0.8311	2.196
20.329	0.8367	2.217
35.015	0.8441	2.254
50.012	0.8532	2.298
64.859	0.8623	2.369
78.434	0.8708	2.444
88.864	0.8788	2.544
100.000	0.8863	2.632

Benzene (C_6H_6) + Heptanoic acid ($C_7H_{14}O_2$)

Giacalone, 1942

%	D f.t.	%	D f.t.
1.17	-0.279	31.65	-8.93
3.04	0.705	36.19	10.81
6.63	1.52	40.41	12.78
12.14	2.85	45.65	15.56
17.31	4.21	48.94	17.60
21.57	5.49	51.94	19.60
23.02	5.96	53.89	21.11
27.24	7.32		

Jones, Bowden and al., 1948

%	d	η
	25°	
0	0.8731	603
5	0.8746	631
10	0.8761	666
15	0.8777	705
20	0.8795	752
40	0.8869	990
50	0.8906	1168
60	0.8942	1490
80	0.9029	2300
100	0.9130	3784

Zochowski, 1936 and

Hrynakowski and Zochowski, 1937

%	d	ϵ
	71.0°	
0.000	0.8261	2.180
5.031	0.8284	2.186
10.179	0.8300	2.193
20.005	0.8346	2.213
34.407	0.8415	2.248
50.313	0.8497	2.278
63.546	0.8568	2.348
79.577	0.8654	2.433
90.224	0.8714	2.503
100.000	0.8771	2.587

Benzene (C ₆ H ₆) + 1-Methyl hexanoic acid (C ₇ H ₁₄ O ₂)				Zochowski, 1936 and Hrynakowski and Zochowski, 1937			
Rule, Smith and Horrower, 1933							
mol %	(α) mol 54.61	mol %	(α) mol 54.61	%	d	ε	
20°				71.0°			
1.3	+35.3	28.3	+33.78	0.000	0.8261	2.180	
3.1	+35.4	44.7	+33.15	4.987	0.8277	2.185	
6.8	+34.9	66.7	+32.65	10.327	0.8300	2.193	
12.2	+34.5	100	+32.14	19.908	0.8338	2.209	
19.6	+34.1			34.203	0.8398	2.238	
				49.913	0.8475	2.283	
				64.440	0.8561	2.338	
				79.853	0.8617	2.449	
				91.926	0.8679	2.501	
				100.000	0.8723	2.544	
Benzene (C ₆ H ₆) + Caprylic acid (C ₈ H ₁₆ O ₂)							
Powney and Addison, 1938 (fig.)				Benzene (C ₆ H ₆) + Pelargonic acid (C ₉ H ₁₈ O ₂)			
vol%	f. t.	vol%	f. t.	Giacalone, 1942			
0	5.4	55	-8	%	D f. t.	%	D f. t.
10	2	65	3	2.20	-0.40	36.15	-9.09
20	0	75	+2.5	6.50	1.20	39.84	10.40
30	-3	85	8	11.40	2.17	45.76	13.15
40	6	90	10	16.60	3.29	49.70	15.31
50	12	100	16	21.07	4.36	51.99	16.66
				27.04	5.97	54.14	18.20
				31.91	7.45	55.52	19.20
Ralston and Hoer, 1942							
%	f. t.						
88.5	10	Benzene (C ₆ H ₆) + Caprinic acid (C ₁₀ H ₂₀ O ₂)					
100	16.30	Ralston and Hoerr, 1942					
Giacalone, 1942							
%	D f. t.	%	D f. t.	%	f. t.		
1.77	-0.38	30.32	-7.64	59.2	10		
5.15	1.09	34.87	9.34	79.9	20		
9.80	2.08	42.86	12.93	98.8	30		
15.40	3.37	45.74	14.47	100	30.32		
20.24	4.63	47.52	15.46				
26.08	6.27	52.49	18.63				
Jones, Bowden and al., 1948				Benzene (C ₆ H ₆) + Undecanoic acid (C ₁₁ H ₂₂ O ₂)			
%	d	η		Ralston and Hoerr, 1942			
25°				%	f. t.		
0	0.8731	603		67.5	10		
5	0.8743	638		86.9	20		
10	0.8754	680		100	28.13		
15	0.8764	727					
20	0.8776	781					
40	0.8833	1072					
50	0.8867	1295					
60	0.8900	1591					
80	0.8981	2505					
100	0.9064	5160					

Benzene (C_6H_6) + Lauric acid ($C_{12}H_{24}O_2$)

Powney and Addison, 1938 (fig.)

vol%	f.t.	vol%	f.t.
0	5.4	30	11
5	4.5	40	16
10	3	60	24
15	2	80	33
17	4	100	44
20	6.5		

Ralston and Hoerr, 1942

%	f.t.
24.4	10
48.4	20
72.2	30
93.3	40
100	43.86

Timofeev, 1905

initial	%	final	Q dil (mole acid)
0		1.12	-10310
1.12		3.82	9960
3.82		8.8	9780
8.8		13.3	9600
13.3		17.4	9580
17.4		21.1	9580
21.1		22.8	9450
22.8		24.5	9370

Benzene (C_6H_6) + Tridecanoic acid ($C_{13}H_{26}O_2$)

Ralston and Hoerr, 1942

%	f.t.
29.8	10
53.9	20
78.0	30
98.7	40
100	41.76

Benzene (C_6H_6) + Myristic acid ($C_{14}H_{28}O_2$)

Powney and Addison, 1938 (fig.)

vol%	f.t.
0	5.4
9	8
15	13
20	16
30	21
40	25
60	33
80	42
100	54

Ralston and Hoerr, 1942

%	f.t.
6.50	10
22.6	20
46.6	30
70.5	40
92.8	50
100	53.78

Benzene (C_6H_6) + Pentadecanoic acid ($C_{15}H_{30}O_2$)

Ralston and Hoerr, 1942

%	f.t.
8.12	10
26.4	20
50.8	30
74.7	40
95.8	50
100	52.49

Benzene (C_6H_6) + Palmitic acid ($C_{16}H_{32}O_2$)

Powney and Addison, 1938 (fig.)

vol%	f.t.	vol%	f.t.
0	5.4	50	38
5	17	60	43
10	21	70	47
20	27	80	52
30	31	90	57
40	35	100	62.5

Ralston and Hoerr, 1942

%	f.t.
1.03	10
6.80	20
25.8	30
51.2	40
75.4	50
95.6	60
100	62.4

Zochowski, 1936 and Hrynakowski and Zochowski, 1937

%	d	e
	71.0°	
0.000	0.8261	2.180
5.004	0.8268	2.183
10.296	0.8278	2.187
20.084	0.8294	2.196
34.814	0.8319	2.212
50.220	0.8358	2.236
64.800	0.8390	2.258
79.429	0.8427	2.295
89.796	0.8461	2.321
100.000	0.8496	2.348

Benzene (C_6H_6) + Margoric acid ($C_{17}H_{34}O_2$)

Ralston and Hoerr, 1942

%	f.t.
1.50	10
8.46	20
29.6	30
54.8	40
78.7	50
98.3	60
100	60.94

Benzene (C_6H_6) + Stearic acid ($C_{18}H_{36}O_2$)

Powney and Addison, 1938 (fig.)

f.t.	vol %
5.4	0
15	2
25	6
35	20
43	40
51	60
57.5	80
68	100

Ralston and Hoerr, 1942

%	f.t.
0.24	10
2	20
11.0	30
33.8	40
59.2	50
82.4	60
100	69.20

Zochowski, 1936 and Hrynakowski and Zochowski, 1937

%	d	e
	71.0°	
0.000	0.8261	2.180
5.022	0.8267	2.183
10.085	0.8273	2.186
20.315	0.8285	2.191
34.723	0.8309	2.208
49.531	0.8346	2.225
64.722	0.8386	2.299
79.973	0.8425	2.278
90.971	0.8449	2.299
100.000	0.8470	2.318

Benzene (C_6H_6) + Oleic acid ($C_{18}H_{34}O_2$)

Powney and Addison, 1938 (fig.)

vol%	f.t.	vol%	f.t.
0	+5.4	50	-6
10	4	60	0
20	2	70	+3
25	1	80	6
30	0	90	10
40	-2.5	100	13.5

Hoerr and Harwood, 1952

%	f.t.
59.7	-9.2 E
71.7	0.0
90.1	10.0

Benzene (C_6H_6) + Linoleic acid ($C_{18}H_{32}O_2$)

Powney and Addison, 1938 (fig.)

vol %	sat.t.
13	0.0
20	1.0
30	1.0
41	0.0

Hoerr and Harwood, 1952

%	f.t.
74.6	-21.2 E
76.2	-20
92.6	-10

Benzene (C_6H_6) + Lactic acid ($C_3H_6O_3$)

Francis, 1944

C.S.T. = 66°

Benzene (C_6H_6) + Ricinoleic acid ($C_{18}H_{34}O_3$)

Powney and Addison, 1938

vol%	Sat.t.	vol%	Sat.t.
0	10	50	33.0
10	20.0	60	29.7
15	26.2	70	25.0
20	30.1	80	17.5
40	34.9		

Benzene (C_6H_6) + 14-Oxytetradecanoic acid
($C_{14}H_{28}O_3$)

Stoll and Rouve, 1934 (fig.)

%	f.t.	%	f.t.
0	10	27	50
2	20	35	55
3	30	43	60
4	40	50	65
15	45		

Benzene (C_6H_6) + Monochloroacetic acid
($C_2H_3O_2Cl$)

Kendall and Booge, 1916

%	f.t.	%	f.t.
0	5.4	42.6	40.2
1.7	4.8	53.0	44.1
5.0	3.8	60.6	46.5
8.6	10.8	69.1	49.7
11.0	15.9	75.1	52.0
19.4	27.6	81.7	54.2
24.3	31.3	91.3	57.8
30.0	34.7	100	61.4

Aumeras and Minangoy, 1950 (fig.)

%	f.t.		
	I	II	III
0	5	-	-
5	3	-	-
10	12	8	-
20	27	21	-
30	35	29	20
40	39	33	24
50	43	37	30
60	46	41	33
70	50	45	37
80	54	47	40
90	57	51	45
100	62	57	50

Benzene (C_6H_6) + Dichloroacetic acid ($C_2H_2O_2Cl_2$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	Q mix
0	74.66	-
10	69.5	-10.5
20	-	19.0
30	61.2	20.0
40	56.9	15.0
50	52.0	11.0
60	45.0	8.0
70	-	6.0
80	-	4.5

Humburg, 1893

%	d	(α) mol magn
16°		
100	1.5488	5.1770
24.4065	0.9860	5.2380
0	0.88422	-

Benzene (C_6H_6) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Mameli, 1903

%	D b.t.	%	D b.t.
0.384	+0.096	7.135	+0.890
0.561	0.121	8.345	1.010
0.926	0.176	9.361	1.126
1.421	0.234	14.000	1.608
2.166	0.346	21.085	2.380
4.694	0.618		

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	+5.4	44.4	16.1
10.4	+1.5	52.7	23.1
15.7	-0.5	64.8	33.0
23.6	-3.8	74.5	39.6
31.4	+3.0	83.6	46.8
37.3	+9.4	100	57.2

Benzene (C_6H_6) + Benzoic acid ($C_7H_6O_2$)

Raoult, 1890

t	p	
	12.3%	0%
90.20	1015.1	970.9
80.13	750.2	717.0
60.40	396.4	379.5

Innes, 1902

%	b. t.	%	b. t.
310 mm		433 mm	
0	53.7	0	63.1
0.63	53.759	0.55	63.166
1.40	53.835	1.31	63.243
2.31	53.913	2.37	63.354
5.00	54.160	4.07	63.516
6.35	54.285	6.46	63.755
8.68	54.325	9.43	64.084
11.18	54.783		

613 mm

756 mm

0	73.2	0	80.1
0.82	73.306	1.54	80.309
1.66	73.402	3.91	80.503
2.85	73.533	4.50	80.663
3.99	73.665	5.99	80.843
5.72	73.860	8.61	81.170
7.68	74.089	11.50	81.541
10.39	74.408	16.46	82.188
13.12	74.738	21.38	82.923

1090 mm

0	93.1
1.31	93.281
2.64	93.459
4.16	93.660
6.13	93.909
9.16	94.299
12.96	94.806
18.50	95.536

Roloff, 1895

%	f. t.
0	5.37
1.09	5.11
2.48	4.82
3.71	4.54
4.50	4.35
4.73	4.29
5.05	4.22
5.41	4.20
5.94	4.20

E=4.2

%	f. t.	%	f. t.
5.0	4.0	6.7	13.7
5.0	4.6	7.2	15.05
5.1	5.2	7.4	17.1
5.3	6.05	14.5	33.9
5.6	7.6	34.2	60.5
5.7	8.4	42.6	68.7
5.7	9.5	78.2	99.6
6.3	11.7	87.5	105.3
		100	121
Sidgwick and Ewbank, 1921			
%	f. t.	%	f. t.
100	122.7	20.08	43.5
80.5	103.0	9.40	23.0
59.7	84.4	4.92	6.5
40.12	66.7	0	5.5
Chipman, 1924			
wt%	mol%	f. t.	
5.1	3.32	4.3	E
6.1	3.99	10.0	
8.95	5.94	20.0	
10.05	7.23	25.0	
13.0	8.74	30.0	
18.4	12.61	40.0	
25.3	17.94	50.0	
74.1	24.9	60.0	
44.5	33.7	70.0	
55.6	44.4	80.0	
67.3	56.8	90.0	
78.3	69.8	100.0	
88.9	88	110.0	
100.0	100	121.7	
Mortimer, 1923			
mol%	f. t.		
6.1	20		
12.6	40		
23.7	60		
41.7	80		
100.0	121.0		
Benzene (C_6H_6) + Phenylacetic acid ($C_8H_8O_2$)			
Innes, 1918			
wt%	mol%	p	
	75°		
0	0	652.6	
5.73	3.36	639.7	
11.54	6.95	626.4	
22.4	10.2	600.3	
31.8	21.1	573.2	
42.8	30.0	534.7	
53.6	39.8	486.9	
0	0	655.1	
58.5	44.8	469.7	
74.2	62.0	357.7	
84.0	75.2	252.8	
Sidgwick and Ewbank, 1921			
%	f. t.	%	f. t.
0	5.5	28.00	13.0
6.22	4.4	42.98	29.0
13.04	3.2	61.28	42.0
16.30	2.2	81.03	59.0
19.93	3.0	100	76.7
Benzene (C_6H_6) + 2-Phenylpropionic acid ($C_9H_{10}O_2$)			
Sidgwick and Ewbank, 1921			
%	f. t.	%	f. t.
0	+5.5	60.43	12.8
19.65	+1.5	78.87	28.0
31.26	-1.8	100	48.6
40.20	+3.1		

Benzene* (C_6H_6) + o-Aldehydebenzoic acid
($C_7H_6O_3$)

Sidgwick and Clayton, 1922

%	f.t.	%	f.t.
100	100.5	39.88	73.9
81.84	81.0	21.87	72.3
64.09	77.8	10.16	66.7
49.50	75.7		

Benzene (C_6H_6) + m-Aldehydebenzoic acid
($C_7H_6O_3$)

Sidgwick and Clayton, 1922

%	f.t.	%	f.t.
100	175.0	56.98	149.9
73.36	154.5	43.84	149.7

Benzene (C_6H_6) + p-Aldehydebenzoic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1922

%	f.t.	%	f.t.
100	250.0	1.41	131.9
2.40	196.0	0.96	110.0

Benzene (C_6H_6) + o-Hydroxybenzoic acid ($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	159.0	20.8	98.5
81.3	140.0	5.27	65.0
64.5	131.5	1.92	44.3
41.1	114.5		

Krupatkin, 1956

%	f.t.	%	f.t.
100	155.0	31.36	135.0
84.97	148.5	18.95	127.0
70.0	145.0	8.50	113.0
46.89	139.5	5.00	102.5

Benzene (C_6H_6) + m-Hydroxybenzoic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	201.3	10.54	162.0
83.3	192.5	5.16	154.5
62.3	185.5	2.95	141.0
41.6	182.5	1.23	122.5
22.4	173.0		

Benzene (C_6H_6) + p-Hydroxybenzoic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	213.0	10.3	178.0
83.0	206.0	4.30	165.3
61.3	198.8	3.03	156.9
40.6	195.7	1.04	132.2
21.0	191.5		

Benzene (C_6H_6) + 1,2,3-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	167.0	29.96	107.2
90.33	155.4	9.67	79.1
69.92	138.3	5.23	62.4
49.18	123.0	2.01	45.2

Benzene (C_6H_6) + 1,2,4-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	177.8	29.33	117.6
91.6	167.6	9.74	90.2
71.7	150.3	4.96	71.7
50.7	135.1	2.02	48.8

Benzene (C_6H_6) + 1,2,5-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	152.5	29.98	93.3
91.10	142.0	10.53	68.0
70.36	124.7	4.73	48.8
52.05	110.6	1.76	30.0

Benzene (C_6H_6) + 1,3,4-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	208.5	29.8	176.5
91.7	202.5	9.80	160.5
72.7	192.0	4.87	147.4
50.0	183.7	2.18	131.6

Benzene (C_6H_6) + 1,4,3-Hydroxytoluic acid
($C_8H_8O_3$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	172.4	29.8	139.5
90.7	166.0	10.11	126.2
71.7	152.8	4.78	116.7
52.6	145.0	2.78	109.5

Benzene (C_6H_6) + Coumaric acid ($C_9H_8O_2$)

Innes, 1918

wt%	mol%	p
75°		
0	0	649.4
5.73	2.94	638.7
10.43	5.77	629.8
18.95	11.0	612.8
28.95	16.5	590.2

Benzene (C_6H_6) + Thymotic acid ($C_{11}H_{14}O_3$)

Mameli, 1903

%	D b.t.
0.456	+0.077
0.940	0.138
1.948	0.247
3.544	0.379
5.746	0.577
8.211	0.794
12.804	1.180
16.359	1.458

Benzene (C_6H_6) + Monoctyl phthalate ($C_{16}H_{14}O_4$)

Dunstan and Thole, 1910 (fig.)

%	d	η
r 5.86	0.8826	676.7
r 8.24	0.8863	718.9
r 10.61	0.8901	752.0
r 14.95	0.8966	843.2
r 15.28	0.8977	860.4
r 18.29	0.9017	919.0
d 6.18	0.8836	684.4
d 10.71	0.8887	757.5
d 11.16	0.8866	763.1
d 19.44	0.9054	952.5
l 19.29	0.9046	941.8

Benzene (C_6H_6) + o-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f.t.	%	f.t.
100	140.3	9.91	57.7
90.9	129.5	5.15	44.8
70.4	113.9	1.98	26.0
50.08	99.6	0	5.5
29.81	82.7		

Benzene (C_6H_6) + m-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	154.5	9.67	65.5
90.2	142.5	4.96	51.2
71.15	125.3	2.25	35.8
49.0	108.0	0	5.5
30.1	93.7		

Benzene (C_6H_6) + p-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	241.5	10.3	137.4
92.2	232.5	5.3	119.4
72.9	212.7	1.98	93.6
52.5	194.0	0	5.5
30.5	172.5		

Benzene (C_6H_6) + o-Brombenzoic ($C_7H_5O_2Br$)

Innes, 1902

%	b. t.	%	b. t.
358 mm		753.5 mm	
0	57.8	0	80.0
1.75	57.924	2.41	80.193
3.91	58.062	4.70	80.364
5.79	58.182	6.83	80.529
8.07	58.321	9.66	80.758
		12.74	80.989
		16.25	81.278
1090 mm			
0	93.1		
1.68	93.267		
3.03	93.388		
5.28	93.575		
7.58	93.768		
10.65	94.010		
14.67	94.368		
18.83	94.750		
23.73	95.258		

Benzene (C_6H_6) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	146.8	10.00	90.5
81.00	128.3	5.03	78.6
50.25	113.0	2.10	63.0
28.32	105.8		

Collett and Lazzell, 1930

mol%	f. t.	mol%	f. t.
100.00	147.7	33.92	114.7
85.01	138.8	20.94	108.7
64.26	128.2	8.70	99.2
54.61	123.2	4.99	92.2
45.85	119.7		

Benzene (C_6H_6) + m-Nitrobenzoic acid ($C_7H_5O_4N$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	141.4	9.87	65.2
79.6	121.0	4.95	48.0
55.5	105.0	1.95	33.0
30.54	89.5		

Collett and Lazzell, 1930

mol%	f. t.	mol%	f. t.
100.00	142.4	22.45	93.4
88.85	134.8	10.25	80.3
72.39	124.8	6.45	71.8
53.30	113.3	3.36	60.7
47.58	109.4	2.27	50.6
36.64	104.2		

[illegible]

Skirrow, 1902			
%		P	
25°			
0		9	
20.48		31.6	
56.89		28	
74.71		25.6	
100		14	

Othmer, 1943			
mol%			
L	V	b.t.	
0	0	118.1	
5	15.5	111.3	
10	25.5	108.9	
20	37.2	105.6	
30	46.0	103.3	
40	54.1	101.7	
50	57.0	100.8	
60	61.5	100.6	
70	66.6	100.6	
70	66.6	100.6	
80	71.8	100.9	
85	75.8	101.4	
90	81.0	102.6	
95	88.5	104.9	
100	100	110.8	

Miro and de la Gandara, 1952			
%		%	
L	V	L	V
700 mm			
95.8	87.3	45.0	40.0
93.1	82.5	39.9	37.7
89.2	74.4	37.1	36.2
86.8	70.0	32.0	33.4
84.2	66.5	24.6	29.0
75.1	57.4	18.4	24.6
70.2	54.2	15.5	22.4
61.7	48.0	10.5	17.7
58.8	46.7	7.3	14.0
53.4	43.9	5.3	11.1

Ryland, 1899			
%		b.t.	
0		108.8 -	109.3
30		103.5 -	104.5
100		117	118
Az			

Lecat, 1949			
%		b.t.	Dt mix
0		110.75	
30		-	-1.0
34		104.95	Az
100		118.1	

Properties of phases.				
Ramsay and Aston, 1902				
%		d		
	15.0°	45.9°	78.0°	- 131.6°
0	1.0542	1.0220	0.9858	0.9215
20.08	1.0056	0.9721	0.9350	0.8730
40.32	0.9633	0.9298	0.8947	0.8361
60.02	0.9259	0.8962	0.8610	0.8060
75.20	0.9040	0.8732	0.8400	0.7846
87.83	0.8859	0.8561	0.8241	0.7707
100	0.8654	0.8387	0.8084	0.7546

%		σ		
	15.0°	45.9°	78.0°	131.6°
0	26.55	23.98	20.99	16.16
20.08	26.61	23.37	20.12	15.09
40.32	26.62	23.25	19.93	14.82
60.02	26.92	23.50	20.05	14.80
75.20	27.40	23.81	20.32	14.88
87.83	27.56	24.00	20.50	15.06
100	28.20	24.59	21.07	15.62

Ritzel, 1907					
P		π		P	
25°					
100 mol%		82.30 mol%		71.68 mol%	
(d = 1.042)		(d = 0.981)		(d = 0.957)	
1	87.5	1	90.1	1	91.0
92.5	81.4	91.5	68.0	99	84.2
218.5	72.6	195.5	74.7	193.5	76.6
357	65.0	308.5	70.3	304.5	71.6
494	57.1	446	63.3	444.5	64.2
58.30 mol%		23.20 mol%		0 mol%	
(d = 0.928)		(d = 0.880)		(d = 0.859)	
1	93.3	1	91.0	1	90.8
86.5	86.2	174	72.9	114.5	80.6
193	78.2	273.	67.4	230.5	70.3
305	67.7	393	58.7	355	62.1
428	64.8			504	60.5

Toluene (C_7H_8) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
41.0	-10.0
62.6	0.0
86.4	+10.0
100	16.51

Toluene (C_7H_8) + Caprinic acid ($C_{10}H_{20}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
20.3	-10.0
36.3	0.0
56.9	+10.0
76.3	20.0
97.6	30.0
100	31.35

Toluene (C_7H_8) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
4.9	-10.0
13.2	0.0
28.8	+10.0
49.2	20.0
71.53	30
93.4	40
100	43.12

Toluene (C_7H_8) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.6	-10.0
3.0	0.0
9.2	+10.0
23.1	20.0
45.5	30.0
69.7	40
93.1	50
100	54.15

Toluene (C_7H_8) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.2	0.0
2.1	10.0
8.0	20.0
23.0	30.0
44.6	40.0
70.8	50.0
100	62.82

Toluene (C_7H_8) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.1	10.0
1.9	20.0
9.1	30.0
26.8	40.0
50.6	50.0
100	69.6

Toluene (C_7H_8) + Lactic acid ($C_3H_6O_3$)

Francis, 1944

C.S.T. = 100°

Toluene (C_7H_8) + Pyruvic acid ($C_3H_4O_3$)

Lecat, 1949

%	b. t.	Sat. t.
0	110.75	
7.5	110.05	Az 13
100	166.8	

Toluene (C_7H_8) + Dichloroacetic acid ($C_2H_2O_2Cl_2$)

Humburg, 1893

%	d	(α) mol magn
	16°	
100	1.5488	5.1770
24.6976	0.9761	5.1627
0	0.8694	-

Toluene (C_7H_8) + Benzoic acid ($C_7H_6O_2$)

Mortimer, 1923

%	f. t.
3.2	0
5.8	20
13.6	40
24.3	60
40.0	80
64.6	100
100.0	121.0

Chipman, 1924

wt%	mol%	f. t.
4.44	3.34	0.0
5.6	4.23	16.0
8.0	6.18	20.0
9.6	7.41	25.0
11.5	8.91	30.0
16.2	12.70	40.0
22.3	17.90	50.0
30.2	24.7	60.0
39.7	33.3	70.0
50.7	43.9	80.0
62.8	56.1	90.0
75.1	69.6	100.0
86.8	83.4	110.0
100.0	100.0	121.7

Toluene (C_7H_8) + 6-nitro-3-methylbenzoic acid
($C_8H_7O_4N$)

Giacalone, 1935

%	f. t.	%	f. t.
0.30	0	7.96	50
0.64	10	14.62	60
1.20	20	25.10	70
2.35	30	39.83	80
4.38	40		

Ethylbenzene (C_8H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	196.15
68	94.0 Az
100	100.75

Ethylbenzene (C_8H_{10}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	196.15	
65		-0.8
66	114.65 Az	
100	118.1	

Parthasaraty, 1934

X-ray diffraction

%	Spacing in Å	
	inner ring	outer ring
0	-	5.30
33	-	5.06
50	-	4.71
67	7.20	4.19
100	7.20	4.10

Lecat, 1949

Ethylbenzene (C_8H_{10}) (b. t. = 196.15) +
Acids

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propionic acid	$C_3H_6O_2$	141.3	30	131.1	+0.2 (28%)
Butyric acid	$C_4H_8O_2$	164.0	4	135.8	-0.1 (5%)
Isobutyric acid	$C_4H_8O_2$	154.6	10	134.5	+0.1 (12%)
Pyruvic acid	$C_3H_4O_3$	166.8	22	130.5	-

Butylbenzene ($C_{10}H_{14}$) (b.t. = 183.1) + Acids						Propylbenzene (C_9H_{12}) (b.t. = 159.3) + Acids					
2nd Comp.			Az			2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix	Name	Formula	b.t.	%	b.t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	75	162.5	-0.1 (93%)	Formic acid	CH_2O_2	100.75	93	98.8	-
Isovaleric acid	$C_5H_{10}O_2$	176.5	50	173.0	-0.2 (50%)	Propionic acid	$C_3H_6O_2$	141.3	75	139.5	-0.1 (90%)
Monochlor-acetic acid	$C_2H_5O_2Cl$	189.35	52	172.8	-	Butyric acid	$C_4H_8O_2$	164.0	30	154.5	-0.2 (28%)
Monobrom-acetic acid	$C_2H_3O_2Br$	105.1	25	179.5	-	Isobutyric acid	$C_4H_8O_2$	156.4	47	149.5	-0.2 (50%)
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	20	181.3	-	Valeric acid	$C_5H_{10}O_2$	186.35	7	158	-
						Isovaleric acid	$C_5H_{10}O_2$	176.5	14	157.5	-0.1 (10%)
						Pyruvic acid	$C_3H_4O_3$	166.8	37	147.6	-
						Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	25	156.0	-
Phenylethylene (C_8H_8) (b.t. = 145.8) + Acids						Isopropylbenzene (C_9H_{12}) (b.t. = 152.8) + Acids					
Formula			Az			2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix	Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH_2O_2	100.75	73	95.75	-	Formic acid	CH_2O_2	100.75	88	97.2	-
Acetic acid	$C_2H_4O_2$	118.1	80	116.2	-1.3 (80%)	Acetic acid	$C_2H_4O_2$	118.1	-	116.8	-
Propionic acid	$C_3H_6O_2$	141.3	45	135.5	-	Propionic acid	$C_3H_6O_2$	141.3	65	139.0	-0.1 (80%)
Butyric acid	$C_4H_8O_2$	164.0	15	143.5	-	Butyric acid	$C_4H_8O_2$	164.0	20	149.5	-0.2 (20%)
Isobutyric acid	$C_4H_8O_2$	154.6	27	142.0	-	Isobutyric acid	$C_4H_8O_2$	154.6	35	146.8	-0.1 (35%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	14	144.8	-	Isovaleric acid	$C_5H_{10}O_2$	176.5	12	152.0	-0.2 (50%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	8	145.2	-	Pyruvic acid	$C_3H_4O_3$	166.8	33	143.0	-
						Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	21	150.5	-
						Isopropyl benzene (C_9H_{12}) + Adipic acid ($C_6H_{10}O_4$)					
						Francis, 1944					
						C.S.T. = 198°					

o-Xylene (C_8H_{10}) (b.t.=144.3) + Acids

Lecat, 1949

Name	2nd Comp. Formula	Az			
		b.t.	%	b.t.	Dt mix
Formic acid	CH_2O_2	100.75	74	95.7	-
Acetic acid	$C_2H_4O_2$	118.1	78	116.2	-1.3 (75%)
Propionic acid	$C_3H_6O_2$	141.3	43	135.4	+0.2 (40%)
Butyric acid	$C_4H_8O_2$	164.0	10	143.0	-0.1 (10%)
Isobutyric acid	$C_4H_8O_2$	154.6	22	141.0	+0.3 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	5	143.8	-0.2 (25%)

o-Xylene (C_8H_{10}) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
36.3	-10.0
60.6	0.0
84.9	+10.0

o-Xylene (C_8H_{10}) + Caprinic acid ($C_{10}H_{20}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
16.8	-10.0
32.3	0.0
53.8	+10.0
75.9	20.0
97.5	30.0

o-Xylene (C_8H_{10}) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.4	-10.0
9.9	0.0
25.8	+10.0
47.9	20.0
70.4	30.0
93.2	40.0

o-Xylene (C_8H_{10}) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.3	-10.0
2.3	0.0
7.7	+10.0
20.7	20.0
42.9	30.0
68.8	40.0
	50.0

o-Xylene (C_8H_{10}) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.1	0.0
1.9	10.0
7.3	20.0
20.2	30.0
43.5	40.0
70.1	50.0

o-Xylene (C_8H_{10}) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.1	10.0
1.7	20.0
8.2	30.0
25.5	40.0
50.3	50.0

o-Xylene (C_8H_{10}) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.
23.3	-20
46.8	-10
71.4	0
91.7	10

E : 5.6% -31.0°

o-Xylene (C_8H_{10}) + Pyruvic acid ($C_3H_4O_3$)

Lecat, 1949

%	b. t.	Dt mix
0	144.3	
28	137.0 Az	
30	-	-0.2
100	166.8	

o-Xylene (C_8H_{10}) + Monochloracetic acid
($C_2H_3O_2Cl$)

Lecat, 1949

%	b. t.	
0	144.3	
12	143.5 Az	
100	189.35	

m-Xylene (C_8H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	
0	139.2	
70	94.2 Az	
100	100.75	

m-Xylene (C_8H_{10}) + Acetic acid ($C_2H_4O_2$)

Ryland, 1899

%	b. t.	
0	136 - 137	
27	113.5 - 114.5	
100	117 - 118	

Lecat, 1949

%	b. t.	Dt mix
0	139.2	
62	-	-1.8
72.5	115.35	
100	118.1	

Parthasarathy, 1934

X - ray diffraction

%	spacing in Å	
	inner ring	outer ring
100	7.20	4.10
67	7.20	4.11
50	-	4.42
33	-	4.87
0	-	5.54

Lecat, 1949

m-Xylene (C_8H_{10}) (b. t. = 139.2) + Acids.

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propionic acid	$C_3H_6O_2$	141.3	35.5	132.65	-0.3 (50%)
Butyric acid	$C_4H_8O_2$	164.0	6	138.5	+0.4 (43%)
Isobutyric acid	$C_4H_8O_2$	154.6	15	136.4	+0.4 (15%)
Pyruvic acid	$C_3H_4O_3$	166.8	24	132.85	38.5 (24%)
Monochloracetic acid	$C_2H_3O_2Cl$	189.35	7	139.05	-

m-Xylene (C_8H_{10}) + Lactic acid ($C_3H_6O_3$)

Francis, 1944

C.S.T. = 124°

p-Xylene (C_8H_{10}) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.		Dt mix
0	138.45		
68	94.5	Az	-1.5
100	100.75		

p-Xylene (C_8H_{10}) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.		Dt mix
0	138.45		
70	-		-1.5
71	115.0		
100	118.1		

Paterno and Montemartini, 1894

1st series

%	f. t.	%	f. t.
99.121	14.92	46.696	0.535
98.060	14.555	46.155	0.55
96.694	14.095	45.659	0.545
95.324	13.63	45.005	0.50
93.878	13.17	44.264	0.505
92.190	12.65	43.632	0.69
90.000	12.01	42.990	0.890
88.267	11.50	42.310	1.075
84.983	10.65	41.521	1.28
82.510	9.96	40.764	1.915
80.43	9.255	39.526	2.285
77.609	8.69	37.646	2.77
75.126	8.025	35.494	3.29
72.442	7.475	33.081	3.885
69.770	6.845	31.442	4.40
67.006	6.165	29.222	4.86
64.517	5.55	27.122	5.38
63.275	5.315	24.994	5.925
61.524	4.825	22.884	6.405
59.758	4.380	20.919	6.965
57.469	3.815	12.473	9.07
55.063	2.925	9.868	10.02
52.558	2.475	7.673	10.57
51.082	1.865	6.477	10.93
49.201	1.135	4.908	11.44
48.945	0.71	2.106	12.40
47.600	0.51	1.206	12.72
47.191	0.54	0.761	12.86

Paterno and Montemartini, 1894

2nd series

%	f. t.	%	f. t.
0	13.23	6.926	10.98
0.767	12.91	8.311	10.62
1.221	12.77	10.948	10.09
2.151	12.45	11.928	9.69
3.871	11.895	14.250	9.12
5.161	11.49		

Paterno and Ampola, 1897

%	f. t.	E
100.0	15.05	-
60.50	4.56	-
60.16	4.30	-
59.60	3.95	0.035
57.83	3.39	0.04
56.25	2.73	0.065
54.75	1.77	-
53.44	1.30	0.06
51.75	0.95	-
51.05	0.60	0.075
49.90	0.21	-
48.53	0.17	-
47.72	0.31	0.14
47.01	0.55	0.11
46.26	0.76	0.09
0.0	13.35	-

p-Xylene (C_8H_{10}) (b. t. = 138.45) + Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propionic acid	$C_3H_6O_2$	141.3	34	232.5	+0.1 (35%)
Butyric acid	$C_4H_8O_2$	164.0	5.5	137.8	-0.1 (5%)
Isobutyric acid	$C_4H_8O_2$	154.6	14	136.4	+0.1 (15%)
Monochlor- acid	$C_2H_5O_2Cl$	189.35	4	138.35	-

Xylene (C_8H_{10}) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

L	mol%	V	b. t.
0	0		138.8
3	21.5		135.0
5	30.6		132.8
10	42.1		128.5
20	52.5		123.1
30	60.5		120.1
40	66.4		118.3
50	70.1		117.0
60	73.2		116.3
70	76.4		115.6
80	80.7		115.2
85	83.2		115.3
90	86.5		115.4
95	91.6		116.2
100	100.0		118.1

Powney and Addison, 1938

vol%	f. t.	vol%	f. t.
5	21	60	46
10	27.5	70	50
20	29	80	53
30	33	90	57.5
40	37.5	100	62.5
50	42		

p-Cymene ($C_{10}H_{14}$) (b. t. = 176.7) + Acids

Lecat, 1949

Name	2nd Comp.	b. t.	%	Az	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	60	162.0	-0.3 (60%)
Isobutyric acid	$C_4H_8O_2$	154.6	80	153.4	-0.2 (80%)
Valeric acid	$C_5H_{10}O_2$	186.35	22	173.5	-0.2 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	38	170.8	-0.3 (50%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	3	176.2	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	42	169.0	-
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	15	174.7	-
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	-	176.0	-
l-Monobrom-propionic acid	$C_3H_5O_2Br$	205.8	4	176.4	-

Mesitylene (C_9H_{12}) (b. t. = 164.6) + Acids.

Lecat, 1949

Name	2nd Comp.	b. t.	%	Az	Dt mix
Formic acid	CH_2O_2	100.75	90	99.7	-
Propionic acid	$C_3H_6O_2$	141.3	82	141.0	-0.2 (80%)
Butyric acid	$C_4H_8O_2$	164.0	38	158.0	-0.2 (33%)
Isobutyric acid	$C_4H_8O_2$	154.6	57	151.5	-0.2 (50%)
Valeric acid	$C_5H_{10}O_2$	186.35	10	164.0	-
Isovaleric acid	$C_5H_{10}O_2$	176.5	19	162.5	-0.2 (20%)
Pyruvic acid	$C_3H_4O_3$	166.8	40	151.2	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	30	160.5	-

Diisopropylbenzene ($C_{12}H_{18}$) + Sebacic acid($C_{10}H_{18}O_4$)

Francis, 1944

C.S.T. : lower than 120°

Diisopropylbenzene ($C_{12}H_{18}$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Francis, 1944

C.S.T. = 149°

Diamylbenzene ($C_{16}H_{26}$) + Chloracetic acid
($C_2H_3O_2Cl$)

Francis, 1944

C.S.T. = 56°

Diamylbenzene ($C_{16}H_{26}$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Francis, 1944

C.S.T. = 250°

1,2,4-Trimethylbenzene (C_9H_{12}) (b. t. = 168.2) +
Acids.

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b. t.	%	b. t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	45	159.5	-0.3 (50%)
Isobutyric acid	$C_4H_8O_2$	154.6	65	152.4	-0.5 (60%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	23	165.0	-0.2 (23%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	34	162.8	-

1,3,5-Triethylbenzene ($C_{12}H_{18}$) (b. t. = 215.5)
+ Acids

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b. t.	%	b. t.	Dt mix
Caproic acid	$C_6H_{12}O_2$	205.15	63	202.0	-
Heptanoic acid	$C_7H_{14}O_2$	222.0	27	211.0	-0.1 (25%)
Levulinic acid	$C_5H_8O_3$	252	-	214.0	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	75	185.5	-
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	76	199.0	-

Triethylbenzene ($C_{12}H_{18}$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Francis, 1944

C.S.T. = lower than 136°

Methyldiisopropylbenzene ($C_{13}H_{20}$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Francis, 1944

C.S.T. = 168°

Hexaethylbenzene ($C_{18}H_{30}$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Francis, 1944

C.S.T. = 211°

Diphenylmethane ($C_{13}H_{12}$) (b.t. = 265.4) +
Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Pelargonic acid	$C_9H_{18}O_2$	254.0	75	252.7	-
Caprinic acid	$C_{10}H_{20}O_2$	268.8	28	262.5	-
Benzoic acid	$C_7H_6O_2$	250.8	83	249.55	114 (83%)
Phenyl acetic acid	$C_8H_8O_2$	266.5	35	258.7	140.6 (35%)

Triphenylethylene ($C_{20}H_{16}$) + Methyl ether of the
1,1-dimethyl-2-ethyl allenolic acid ($C_{18}H_{22}O_3$)

Jacques, 1949 (fig.)

%	f. t.	m. t.
0	114	114
10	114	106
20	112	103
30	109	103
33	106	103 E
40	113	103
50	121	103
60	127	103
70	130	103
80	132	112
90	136	127
100	139	139

Diphenyl ($C_{12}H_{10}$) (b.t.=256.1) + Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Pelargonic acid	$C_9H_{18}O_2$	254.0	45	250.0	-
Benzoic acid	$C_7H_6O_2$	250.8	50.5	246.15	87.5 (50.5%)
Phenyl acetic acid	$C_8H_8O_2$	266.5	23.3	252.35	-

Dibenzyl ($C_{14}H_{14}$) + Adipic acid ($C_6H_{10}O_4$)

Francis, 1944

C.S.T. : lower than 147°

Dibenzyl ($C_{14}H_{14}$) + Phenylacetic acid ($C_8H_8O_2$)

Lecat, 1949

%	b. t.
0	284.5
70	264.3 Az
100	266.5

Naphthalene ($C_{10}H_8$) + Acetic acid ($C_2H_4O_2$)

Timofeev, 1894

%	f. t.
6.4	6.75
11.6	21.5
23.7	42.5
34.8	51.3
52.6	60.0
100	80

Ward, 1926

mol%	f. t.	mol%	f. t.
4.37	15.6	19.55	50.4
5.80	23.5	34.1	59.6
7.30	29.0	47.7	64.9
10.16	36.5	58.2	68.3
14.9	45.2	81.8	75.1

Naphthalene ($C_{10}H_8$) + Propionic acid ($C_3H_6O_2$)

Timofeev, 1894

%	f. t.
12.2	6.75
18.9	21.5
44.4	50.0
100	80

Naphthalene ($C_{10}H_8$) + Butyric acid ($C_4H_8O_2$)

Timofeev, 1894

%	f. t.
12.0	6.75
18.1	21.5
58.8	60.0

Naphthalene ($C_{10}H_8$) + Valeric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.
0	218.0
96	186.0 Az
100	186.35

Timofeev, 1894

%	f. t.
8.7	6.75
15.1	21.5
62.6	65.0

Naphthalene ($C_{10}H_8$) (b. t. = 218.0) + acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Caproic acid	($C_6H_{12}O_2$)	205.15	71	203.75	37.0
Isocaproic acid	($C_6H_{12}O_2$)	199.5	75	199.0	-
Heptanoic acid	($C_7H_{14}O_2$)	222.0	30	214.2	-

Naphthalene ($C_{10}H_8$) + Lauric acid ($C_{12}H_{24}O_2$)

Eykmann, 1939

%	f. t.
100	43.4
97.167	42.41
94.49	41.45
91.957	40.48
87.28	38.68
83.06	37.13

Naphthalene ($C_{10}H_8$) + Palmitic acid ($C_{16}H_{32}O_2$)

Efremov, Vinogradova and Tikhomirova, 1937

%	f. t.	E	%	f. t.	E
100	59.2	-	45.0	63.2	47.5
95.0	57.3	-	40.0	65.4	47.5
90.0	55.6	41.3	35.0	67.5	47.0
85.0	53.4	45.7	30.0	69.4	46.3
80.0	51.5	48.0	25.0	71.4	45.5
75.0	49.1	47.8	20.0	73.3	43.7
70.0	50.6	47.8	15.0	74.8	42.5
65.0	53.4	47.8	10.0	76.4	40.7
60.0	55.7	47.8	5.0	78.3	37.5
55.0	58.5	47.7	0.0	80.0	-
50.0	60.9	47.6			

Naphthalene ($C_{10}H_8$) + Stearic acid ($C_{18}H_{36}O_2$)

Efremov, 1929 - 1930

%	f. t.	E	min.
100	67.7	-	-
95	66.0	49.5	150
90	64.7	51.5	300
85	62.9	53.0	450
80	61.3	53.3	600
75	59.1	53.3	750
70	56.0	53.3	900
65	53.6	53.3	1050
60	56.5	53.3	960
55	59.6	53.3	870
50	61.9	53.3	780
45	64.4	53.3	690
40	66.5	53.3	600
35	67.9	53.3	540
30	69.8	53.3	450
25	71.5	53.3	390
20	73.5	53.0	300
15	74.9	52.7	240
10	76.6	52.3	150
5	78.2	50.3	60
0	80.0	-	-

E : 65.6% 53.°

Naphthalene ($C_{10}H_8$) + Levulinic acid ($C_5H_8O_3$)

Lecat, 1949

%	b. t.
0	218.0
11	216.7 Az
100	252

Naphthalene ($C_{10}H_8$) + Monochloroacetic acid
($C_2H_3O_2Cl$)

Lecat, 1949

%	b. t.	Sat. t.
0	218.0	
78	187.1 Az	49.7
100	189.35	

Cady, 1899

t	%	t	%
	C		L ₂
75	3.4	60	98.3
70	4.6	55	97.9
65	10.8		
60	19.7		
55	40.4		
53.5	-		

Miers and Isaac, 1909

%	f. t.	%	f. t.
0	79.5	65	55.5
11.078	75.5		52.5
20	72.5		47.5
30.3	69.5		47.5
40	66.5		45.5
49.98	62.5		43.5
59.965	58.75		

%	f. t. I	%	f. t. I
60	50.5	78	55
65	52	80.085	55.6
70	53	80.06	55.6
76.73	54	84.974	56.8
77	54.5	85.297	56.5
77.015	54.5	90.049	58
		100	61.5

%	f. t. II	%	f. t. III
70.5	48.5	80.085	44.5
77.015	49.8	84.974	45.5
78	50	89.867	46.6
80.06	50.1	100	50
85.297	50.5		
90.049	52		
100	55		

Mameli and Mannesier, 1913

%	f.t.I	%	f.t.I	f.t.II
0	79.60	65.58	54.72	-
7.93	76.40	63.11	52.76	-
14.80	74.00	69.16	52.26	-
22.05	71.60	70.05	52.80	50.95
27.46	69.85	72.61	-	49.65
39.57	65.80	72.97	53.06	48.80
39.75	65.70	77.40	54.07	49.35
39.75	65.30	74.85	-	48.99
44.81	63.80	80.79	-	50.25
48.38	62.55	82.17	55.85	-
52.17	61.25	86.10	56.96	-
53.33	60.65	91.02	-	53.16
54.35	60.19	92.86	50.09	-
57.17	59.20	95.61	60.15	-
58.47	58.18	97.41	-	55.42
64.66	55.67	100.00	61.86	56.53

Mameli and Mannesier-Mameli, 1933

%	f.t.	
	I	II
0	79.6	79.6
74.50	52.7 E	-
78.50	-	48.5 E
100	61.8	56.6

Aumeras and Minangoy, 1950 (fig.)

%	f.t.		
	I	II	III
0	80	80	80
10	76	76	76
20	73	73	73
30	70	70	70
40	66	66	66
50	62	62	62
60	58	58	58
68	52	52	52
70	52.5	50	50
72	53	48	48
78	55	50	44
80	56	51	44.5
90	59	52.5	48
100	62.4	57.3	51.4

Naphthalene ($C_{10}H_8$) + Monobromacetic acid
($C_2H_3O_2Br$)

Lecat, 1949

%	b.t.	
0	218.0	
72	201.3	Az
100	205.1	

Naphthalene ($C_{10}H_8$) + l-Monobrompropionic acid
($C_3H_5O_2Br$)

Lecat, 1949

%	b.t.	
0	218.0	
73	202.5	Az
100	205.8	

Naphthalene ($C_{10}H_8$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1940 - 1946

%	f.t.	E
100	57	-
90	49	39
81.5	40	40
70	48	40
61.5	56	40
49	62.5	39
40.5	66.5	38
30	71	37
20	75	-
0	80	-

Kitran, 1924

E : 77 mol% f.t. = 35.2°

Naphthalene (C₁₀H₈) + Benzoic acid (C₇H₆O₂)

Lecat, 1949

%	b. t.	Sat. t.
0	218.0	
5	217.65	Az 79
100	250.8	

Bugnet, 1909

Eutectic .

Vasiliev, 1917

E : 32.3 % 67.9°

Pushin and Wilowitsch, 1925

mol%	f. t.	E	min.
100	121	-	-
80	106	67	0.4
65	94.1	66.2	0.8
50	82	68	1.2
40	73	"	1.4
30	68	"	2.1
25	70.5	mixed crystals	
20	72	"	
18	73	"	
16.7	74	"	
15	74.5	"	
12	75.5	"	
10	76	"	
7	77	"	
0	80	"	

Bernoulli and Sarasin, 1930

%	f. t.	E	%	f. t.	E
0	79.8	-	40.0	73.8	68.3
10.7	76.5	68.1	55.1	88.5	68.5
19.9	73.1	68.5	70.0	99.5	-
30.1	69.0	68.0	89.8	115.1	67.35
33.0	68.3	-	100	122.5	-
35.1	68.4	-			

Sorum and Durand, 1952

%	f. t.
0	80.1
-	69.0 E
100	121.4

Naphthalene (C₁₀H₈) + Diphenylglycolic acid (C₁₄H₁₂O₃)

Bernoulli and Sarasin, 1930

%	f. t.	E	%	f. t.	E
0	79.8	-	50.0	113.0	77.5
5.0	78.5	78.1	70.1	123.0	77.0
10.1	79.5	78.0	85.3	136.0	73.0
15.0	84.5	78.0	90.2	139.0	-
19.9	87.0	78.0	100	148.0	-
29.9	102.0	78.3			

Naphthalene (C₁₀H₈) + Salicylic acid (C₇H₆O₃)

Bugnet, 1909

Eutectic .

Bernoulli and Sarasin, 1930

%	f. t.	E	%	f. t.	E
0	79.8	-	40.0	116.6	77.3
5.0	78.3	77.3	60.4	134.5	77.4
10.0	78.0	76.7	70.1	138.9	77.4
13.0	83.4	76.7	80.0	146.8	76.9
20.0	97.0	77.5	100	158.0	-

1-Methylnaphthalene (C₁₁H₁₀) (b. t.=244.6) + Acids

Lecat, 1949

2nd Comp.			Az		
Acids	Formula	b. t.	%	b. t.	Dt mix
Pelargonic	C ₉ H ₁₈ O ₂	254.0	18	243.0	0 (20%)
Benzoic	C ₇ H ₆ O ₂	250.8	27	239.6	67 (27%)
Phenylacetic	C ₈ H ₈ O ₂	266.5	14	243.0	-
Levulinic	C ₅ H ₈ O ₃	252	36	237.0	-

2-Methylnaphthalene (C₁₁H₁₀) (b. t.=241.15) + Acids

Lecat, 1949

2nd Comp.			Az		
Acids	Formula	b. t.	%	b. t.	
Caprylic	C ₈ H ₁₆ O ₂	278.5	48	235.0	
Pelargonic	C ₉ H ₁₈ O ₂	254.0	10	240.2	
Benzoic	C ₇ H ₆ O ₂	250.8	25	237.25	
Phenylacetic	C ₈ H ₈ O ₂	266.5	12	239.95	
Levulinic	C ₅ H ₈ O ₃	252	29	234.55	

Naphthalene derivatives + Acids

Francis, 1944

System	C.S.T.
Isopropyl naphthalene ($C_{13}H_{14}$) + Adipic acid ($C_6H_{10}O_4$)	184
sec.Amyl naphthalene ($C_{15}H_{18}$) + Adipic acid ($C_6H_{10}O_4$)	237
sec.Amyl naphthalene ($C_{15}H_{18}$) + Chloracetic acid ($C_2H_3O_2Cl$)	33
Diisopropyl naphthalene ($C_{16}H_{20}$) + Adipic acid ($C_6H_{10}O_4$)	253
Diisopropyl naphthalene ($C_{16}H_{20}$) + Chloracetic acid ($C_2H_3O_2Cl$)	38
di-tert. Butyl naphthalene ($C_{18}H_{24}$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)	135
Diamyl naphthalene ($C_{20}H_{28}$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)	200

Phenanthrene ($C_{14}H_{10}$) + Propionic acid ($C_3H_6O_2$)

Timofeev, 1894

%	f. t.
83.0	23.0
78.6	39.0
59.7	62.4

Phenanthrene ($C_{14}H_{10}$) + Butyric acid ($C_4H_8O_2$)

Timofeev, 1894

%	f. t.
84.4	23.0
79.0	39.0

Fluorene ($C_{13}H_{10}$) + Acetic acid ($C_2H_4O_2$)

Mortimer, 1923

mol %	f. t.	mol %	f. t.
99.2	20	88.7	80
98.1	40	60.0	100
95.5	60	0.0	114.5

Fluorene ($C_{13}H_{10}$) + Phenylacetic acid ($C_8H_8O_2$)

Lecat, 1949

%	b. t.
0	295
90	265.8 Az
100	266.5

Indene (C_9H_8) (b. t. = 182.6) + Acids

Lecat, 1949

2nd Comp.		Az		
Acids	Formula	b. t.	%	b. t.
Butyric	$C_4H_8O_2$	164.0	84	163.65
Valeric	$C_5H_{10}O_2$	186.35	30	178.5
Isovaleric	$C_5H_{10}O_2$	176.5	60	173.0
Monochlor- acetic	$C_2H_3O_2Cl$	189.35	-	174.5

Acenaphthene ($C_{12}H_{10}$) + Benzoic acid ($C_7H_6O_2$)

Lecat, 1949

%	b. t.
0	277.9
87	250.3 Az
100	250.8

Acenaphthene ($C_{12}H_{10}$) + Phenylacetic acid ($C_8H_8O_2$)

Lecat, 1949

%	b. t.	sat. t.
0	277.9	-
71	262.6 Az	62.8
100	266.5	-

METHYL CHLORIDE + METHYL ALCOHOL

I. HALOGEN DERIVATIVES, CO, CO₂, CS₂ etc...

+ HYDROXYL DERIVATIVES

XXV. HALOGEN DERIVATIVES + ALCOHOLS

Methyl chloride (CH₃Cl) + Methyl alcohol
(CH₄O)

Baume and Borowski, 1914

mol%	f.t.	mol%	f.t.
100	-93.0	36.9	-107.9
84.9	93.5	32.5	107.3
69.4	97.4	31.6	111.2
57.0	99.5	24.2	112.0
42.2	106.2	13.9	98.2
38.5	105.7	0	94.0

Methyl iodide (CH₃I) + Methyl alcohol (CH₄O)

Holley and Weaver, 1905

%	b.t.	
0	44.5	
8	39.6	Az
100	64.8	

Lecat, 1949

%	b.t.	Dt mix
0	42.5	
5.5	37.8	Az
25	-	
100	64.65	-6.2

Holmes and Sageman, 1909

mol%	Dt mix
15°	
7.06	-4.0
10.71	-5.3
20.19	-6.0
34.38	-6.9
43.21	-6.8
51.72	-6.4
66.69	-5.6

Methyl iodide (CH₃I) + Ethyl alcohol (C₂H₆O)

Lecat, 1949

%	b.t.	Dt mix
0	42.5	
3.5	40.7	Az
25	-	
100	78.3	-6.6

Holmes and Sageman, 1909

%	d
0	2.25099
1.955	2.16754
3.917	2.09152
7.708	1.95952
14.649	1.75848
20.965	1.60901
25.415	1.51855
39.969	1.28330
100	0.78660

mol%	Dt mix
5.74	-5.2
11.19	6.0
20.50	7.0
34.58	7.3
44.82	6.8
51.24	6.4
67.24	5.6

Methyl iodide (CH₃I) + Propyl alcohol (C₃H₈O)

Holmes and Sageman, 1909

%	d
25°	
0	2.25099
2.573	2.14551
4.679	2.06778
4.888	2.06041
9.556	1.90565
17.744	1.69210
24.685	1.54483
29.800	1.45214
45.122	1.23133
100	0.79970

mol%	Dt mix
15°	
5.75	-5.4
10.39	6.2
10.87	6.3
20.12	7.5
33.7	8.0
44.22	7.8
50.09	6.9
66.03	5.1

Methyl iodide (CH_3I) + Isopropyl alcohol ($\text{C}_3\text{H}_8\text{O}$)

Lecat, 1949

%	b. t.		Dt mix
0	42.5		
2	42.25	Az	
5	-		-4.3
100	82.4		

Methyl iodide (CH_3I) + Amyl alcohol ($\text{C}_5\text{H}_{12}\text{O}$)

Holmes and Sageman, 1909

mol%		Dt mix
15°		
10.79	-6.5	
19.28	7.8	
33.02	8.1	
48.53	6.9	
66.38	4.5	

Methyl iodide (CH_3I) + Ethyl tartrate ($\text{C}_8\text{H}_{14}\text{O}_6$)

Patterson and Thomson, 1908

t	d	t	d
0%		5.19605%	
18.22	2.28408	19.39	2.17168
20.85	2.27655	21.03	2.16729
26.35	2.26063	26.62	2.15225
10.4466%		38.0899%	
18.86	2.07572	18.77	1.68916
21.02	2.07034	20.89	1.68540
23.16	2.06492	25.12	1.67773

%	d	(α) _D
20°		
0	2.27899	1.08
5.19605	2.17005	1.13
10.4466	2.07288	1.20
38.0809	1.68698	2.85

t	(α) _D	t	(α) _D
5.19605%		10.4466%	
14.9	0.52	18.1	0.95
20.3	1.19	21.5	1.37
28.3	2.16	24.8	1.78
38.0899%			
14.5	2.06	24.4	3.48
22.2	3.06	25.5	3.62

Methylene chlorbromide (CH_2ClBr) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Lecat, 1949

%	b. t.	
0	75.3	
18	66.3	Az
100	78.3	

Methylene chloride (CH_2Cl_2) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.		Dt mix
0	40.0		
7.3	37.8	Az	
55	-		+0.6
100	64.65		

Methylene chloride (CH_2Cl_2) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Lecat, 1949

%	b. t.		Dt mix
0	40.0		
5	39.85	Az	-1.8
100	78.3		

Methylene chloride (CH_2Cl_2) + Methyl malate I ($\text{C}_6\text{H}_{10}\text{O}_5$)

Grossmann, 1910

g/100cc	(α) _D					
	red	jellow	green	light blue	dark blue	violet
50.710	-0.89	-1.38	-1.38	-0.10	+0.30	+0.99
25.355	+0.87	+1.22	+2.37	+3.63	-4.42	-
12.6775	+1.34	+1.66	+2.68	+4.18	+4.89	-
5.421	+1.66	+2.03	+3.32	+4.98	+5.72	+7.56
2.7105	+1.84	+2.21	+3.69	+5.53	+6.27	-

Methylene chloride (CH_2Cl_2) + Ethyl tartrate
($\text{C}_8\text{H}_{14}\text{O}_6$)

Patterson and Thomson, 1908

t	d	t	d
0%		17.0966%	
18.05	1.3397	20.37	1.30830
20.77	1.33467	22.11	1.30563
26.23	1.32464	27.20	1.29719
5.11606%		32.8988%	
19.34	1.32865	19.5	1.28704
22.85	1.32246	22.88	1.28207
25.96	1.31693	27.20	1.27719
9.74502%		61.88%	
18.57	1.32249	18.80	1.24867
21.25	1.31792	21.42	1.24549
28.13	1.30607	26.45	1.23926

t	(α) _D	t	(α) _D
5.11606%		32.8988%	
14.7	-2.81	16.7	-3.02
20.7	-1.88	21.6	-2.27
24.1	-1.57	25.5	-1.62
27.0	-1.08		
30.1	-0.67		
9.74502%		61.88%	
16.2	-3.08	19.0	-0.23
20.4	-2.33	26.9	-1.48
26.5	-1.35	30.9	-2.12
17.966%		32.3	-2.35
		34.7	-2.73
16.5	-3.35		
21.3	-2.60		
25.1	-2.06		
29.1	-1.40		

%	d	(α) _D
20°		
0	1.3361	-1.60
5.11606	1.32749	-2.08
9.74502	1.32006	-2.40
17.0966	1.30890	-2.79
32.8988	1.2863	-2.50
61.8807	1.2473	+0.36

Methylene bromide (CH_2Br_2) + Butanethiol
($\text{C}_4\text{H}_{10}\text{S}$)

Lecat, 1949

%	b. t.
0	97.0
28	95.5 Az
100	97.5

Methylene bromide (CH_2Br_2) (b. t. = 97.0) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	48	64.25	-
Ethyl alcohol	$\text{C}_2\text{H}_6\text{O}$	78.3	40	75.5	-
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	97.2	26	90.5	-
Isopropyl alcohol	$\text{C}_3\text{H}_8\text{O}$	82.4	68	81.0	-6.0 (50%)
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	108.0	18	94.8	-

Methylene iodide (CH_2I_2) + Ethyl alcohol
($\text{C}_2\text{H}_6\text{O}$)

Bingham, 1907

C.S.T. = +22°

Methylene iodide (CH_2I_2) + Alcohols

Timmermans and Kohnstamm, 1909 - 1910

2nd Comp.	Formula	C.S.T.	limits of pressure in Kg/cm ²	dt/dp
Ethyl alcohol	$\text{C}_2\text{H}_6\text{O}$	93.8	5 - 75	-0.004
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	82.9	5 - 205	+0.008
Isopropyl alcohol	$\text{C}_3\text{H}_8\text{O}$	75.7	1 - 200	+0.006
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	93.2	1 - 200	+0.012
		77.5	1 - 80	+0.012

Methylene iodide (CH_2I_2) (b.t. = 181) + Alcohols
Lecat, 1949

Name	2nd Comp. Formula	Az		
		b.t.	%	b.t.
Heptyl alcohol	$\text{C}_7\text{H}_{16}\text{O}$	176.15	62	169.8
Octyl alcohol sec.	$\text{C}_8\text{H}_{18}\text{O}$	180.4	30	174.0
Glycol	$\text{C}_2\text{H}_6\text{O}_2$	197.4	14	168.65
Butoxy-glycol	$\text{C}_6\text{H}_{14}\text{O}_2$	167.15	42	171.15
Furfuryl alcohol	$\text{C}_5\text{H}_6\text{O}_2$	169.35	44	165.8

Chloroform (CHCl_3) + Methyl alcohol (CH_3O)

Haywood, 1899

%	b.t.	p	%	b.t.	p
0	61.95	770.2	31.6	55.3	"
2.3	56.4	"	37.2	56.05	770.3
4.5	54.9	"	43.0	56.85	770.3
6.1	54.5	"	48.9	57.75	770.2
7.3	54.3	"	47.8	57.5	769.8
10.6	54.1	"	56.3	58.9	769.8
12.3	54.025	"	60.7	59.6	769.8
15.4	54.1	770.4	75.0	61.85	770.0
18.1	54.2	"	87.2	63.6	770.0
25.5	54.7	"	100	65.25	770.0

Pettit, 1899

%	b.t.	%	b.t.
P = 746.2 mm			
100.0	64.82	40.2	56.12
89.6	63.54	31.0	55.03
80.8	61.88	22.5	54.33
73.6	61.28	15.4	53.89
67.4	60.23	11.9	53.63
58.1	58.78	8.2	53.63
49.4	57.28	0.42	54.43
48.0	57.28	0.0	61.46

Ryland, 1899

%	b.t.
0	60 - 61
12	53.5 - 54.5 Az
100	64.5 - 65

Lecat, 1949

%	b.t.	Dt. mix
0	61.2	
12.5	53.5	Az
35	-	
100	64.65	+5.6

Lang, 1950

mol% (at b.t.)	
L	V
760 mm	
97.6	93.9
97.5	93.9
91.5	80.7
78.6	60.6
77.9	59.6
73.2	54.7
53.4	51.5
39.3	36.8
32.4	33.9
23.2	31.3
12.1	25.5

Tyrer, 1912

L	V	b.t.
100	100	64.86
90	74.8	64.05
80	58.3	62.38
70	45.9	60.68
60	36.0	59.07
50	27.7	57.52
40	22.0	55.94
30	18.5	54.52
20	15.8	53.66
10	11.3	53.65
0	0	61.37

Conrad and Hall, 1935 (fig.)			
vol%		P	
25°			
100		126	
90		150	
80		175	
70		200	
60		216	
50		226	
40		232	
30		234	
20		234	
10		226	
0		196	

Wyatt, 1929 (fig.)			
mol%		f. t.	
100	-97.8	50	-70
90	-110	40	-66
87.6	-111.8 E	30	-65
80	-95	20	-64.5
70	-82	10	-64
60	-77	0	-63.5
55.2	-77.5 tr. t.		
(1+2)			

Sapgir, 1929			
%		f. t.	
100	-97.8	-	-
81.8	-105.2	-	-
64.1	-111.8	-	-
51.3	-94.7	-	-
38.7	-83.6	-	-
24.4	-75.4	-78.8	-
8.8	-65.7	-	-
0	-63.5	-	-
(1+2)			

Cheneveau, 1907			
%		d	
20°			
100		0.8314	1.3407
75.81		0.9295	1.3556
0		1.4903	1.4489

Hirobe, 1925			
%		d	
25°			
0		1.47820	
2.46		1.44898	
6.12		1.40449	
11.91		1.34162	
13.36		1.32632	
23.09		1.23369	
38.44		1.10980	
51.02		1.02420	
67.22		0.93218	
100		0.78867	

Conrad and Hall, 1935 (fig.)			
vol%		d	
25°			
100		0.7909	
90		0.86	
80		0.91	
70		0.99	
60		1.06	
50		1.11	
40		1.20	
30		1.27	
20		1.33	
10		1.40	
0		1.4793	

vol%			
π		25°	
100		133.3	
90		131.0	
80		128.5	
70		125.5	
60		123.0	
50		120.5	
40		118.0	
30		115.5	
20		113.0	
10		110.5	
0		107.1	

vol%			
η		σ	
n _D			
25°			
100	552	22.33	1.3290
90	591	22.7	1.340
80	617	23.1	1.354
70	636	23.5	1.364
60	649	23.9	1.373
50	650	24.3	1.385
40	641	24.7	1.397
30	621	25.05	1.409
20	594	25.06	1.419
10	571	26.0	1.429
0	572	26.48	1.4493

Peel, Madgin and Briscoe, 1928

1 vol + 1 vol $Dv = -0.225\%$ $Dt = 5.5^\circ$

Timofeev, 1905

%	U
20°	
0	0.2363
10.1	0.295
22.4	0.369
100	0.600

% Q dil	
initial	final
(mole alcohol)	
0	2.7
2.7	5.3
5.3	8.0
8.0	10.3
40.5	42.8
(mole chloroform)	
42.8	39.1
90.1	81.5
100	90.1

Tyrer, 1912.

%	Q vap (cal/gr)
760 mm	
100	263.4
90	209.5
80	177.5
70	154.7
60	137.8
50	122.8
40	110.2
30	99.5
20	91.4
10	84.2
0	59.32

Hirobe, 1925.

%	Q mix
0	-
2.46	-145.9
6.12	328.1
11.91	511.8
13.36	552.1
23.09	533.1
38.44	475.1
51.02	322.3
67.22	-
100	-

Chloroform (CHCl_3) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Heterogeneous equilibria.

Burwinkel, 1914

t	p			
	0%	15.62%	35.91%	50.21%
0	62.6	59	47	37
10	102	95	84	70
20	162	160	136	113
30	253	256	223	190
40	370	377	338	288
50	540	577	507	437

t	p		
	66.33%	83.88%	100%
0	25	17	13
10	53	40	24
20	84	62	45
30	152	108	79
40	228	172	132
50	354	282	226

Röck and Schröder, 1956.

mol%	p	mol%	p
45°			
100.0	172.17		
97.9	184.4	74.1	327.4
93.5	211.0	69.4	350.6
84.2	261.0	65.5	376.5
78.7	302.5	61.4	382.9
		0	436.8
55°			
100	279.13		
97.9	296.0	74.1	490.0
89.4	368.5	69.7	519.9
84.0	412.7	65.7	541.2
78.9	454.7	61.5	562.2
		0.0	618.6

Scatchard and Raymond, 1938

mol%	P	P ₂
L	V	
35°		
0	0	295.11
3.84	5.86	303.91
4.00	5.97	303.69
4.14	6.15	304.17
4.40	6.35	304.87
6.85	8.39	306.05
15.17	12.17	306.25
15.77	12.48	305.12
17.35	13.02	305.39
22.54	14.46	303.05
32.17	16.73	296.93
38.15	18.19	291.95
51.54	21.88	274.46

51.73	22.03	274.04	60.37
56.16	23.54	267.65	69.00
60.78	25.88	255.28	66.07
63.55	26.30	253.39	66.64
67.73	29.91	236.50	70.74
69.86	31.30	229.24	71.75
71.27	32.53	225.06	73.21
76.39	37.93	205.68	78.01
82.70	46.95	177.60	83.40
88.91	61.15	148.26	90.66
94.06	76.57	125.82	96.34
97.03	87.90	113.61	99.86
97.59	90.09	111.31	100.28
99.38	97.46	104.87	102.21
100	100	102.78	102.78

45°

0	0	433.54	0
1.34	2.73	439.89	12.01
2.42	4.21	443.07	18.64
3.23	5.46	445.38	24.32
4.43	6.81	448.49	30.52
8.37	10.26	453.76	46.56
9.00	10.67	454.54	48.45
11.48	12.17	455.79	55.47
17.94	14.84	455.56	67.61
28.52	18.09	448.17	81.07
37.17	20.46	438.89	89.80
45.95	22.97	425.28	97.69
48.60	23.97	420.63	100.83
35.61	26.60	403.91	107.44
59.85	28.57	391.51	111.85
67.02	32.86	365.07	119.96
68.84	34.43	355.66	122.45
74.31	39.40	329.62	129.57
79.89	46.05	299.63	137.98
80.03	46.34	298.08	138.13
87.40	60.26	249.92	150.60
92.88	75.33	214.44	161.54
95.24	82.83	199.62	165.34
98.11	92.84	182.63	169.55
98.43	94.00	180.96	170.10
100	100	172.76	172.76

55.0°

0	0	617.84	0
3.48	5.92	626.79	37.71
5.70	8.50	644.24	54.79
9.63	12.02	650.38	78.18
16.10	15.83	653.11	103.39
22.36	18.19	650.96	118.41
27.31	19.90	646.79	137.47
31.49	21.43	641.49	137.47
37.89	23.61	632.14	149.25
42.70	24.73	623.67	154.23
52.06	28.39	599.03	170.06
60.35	32.40	569.02	184.36
60.96	32.80	566.74	185.89
62.33	33.59	560.25	188.19
65.55	35.81	545.72	195.42
71.94	40.58	507.78	206.46
77.99	47.29	469.41	221.98
81.31	52.05	441.04	229.56
85.21	59.65	407.90	243.31
89.71	68.77	367.01	252.40
91.98	74.67	346.89	259.02
92.88	76.98	339.89	262.65
96.69	88.38	306.38	270.78
100	100	279.86	279.86

Thayer, 1899

%	b. t.	%	b. t.
744.2mm		732.5mm	
100.00	77.86	19.02	59.55
89.13	75.61	14.54	59.08
74.62	72.10	9.31	58.65
67.14	70.19	6.37	58.57
55.77	67.69	2.60	59.06
50.92	65.93	0.00	60.50
46.54	64.78		
40.05	63.32		
34.62	62.18		
28.89	61.03	Az : 7 % 58.5/732.5	
19.51	60.19		
13.06	59.39		
7.09	59.09		
0.00	60.93		

Ryland, 1899

%	b. t.
0	60 - 61
6	58.5 - 59.5
100	77.5 - 78

Wade and Finnemore, 1904

%	b. t.
0	61.15
7.0	59.4
100	78.3

Findlay, 1909

%	b. t.	%	b. t.
0	60.2	44.7	63.5
5.78	58.5	56.1	66.4
10.05	58.4	68.8	69.8
10.91	58.5	83.6	73.4
24.02	59.8	100	77.1
35.28	61.5		

Lecat, 1949

%	b. t.	Dt mix
0	61.2	
7.0	59.35	Az
35	-	+3.9
100	78.3	

Properties of phases				
Drecker, 1883				
%	d			
	0°	19.46°	25.42°	30.96°
0	1.52418	1.48746	1.47680	1.46624
10.349	.39158	.36359	.35340	.34367
19.939	.29592	.26709	.25828	.24931
30.037	.20666	.17976	.17164	.16346
40.074	.13000	.10482	.09694	.08944
49.971	.06201	.03838	.03131	.02442
59.958	.00032	0.97891	0.97250	0.96619
70.000	0.94395	.92551	.91941	.91354
79.968	.89578	.87767	.87195	.86652
90.030	.85108	.83396	.82861	.82351
100	.80760	.79470	.78962	.78483
Philip, 1897				
%	d			
	18°			
0		1.4810		
23.42		1.2350		
39.20		1.1112		
66.02		0.9468		
100		0.7964		
Findlay, 1909				
%	b.t.	d		
0	60.2	1.4098		
5.78	58.5	1.3414		
10.05	58.4	1.2966		
10.91	58.5	1.2879		
24.02	59.8	1.1725		
35.28	61.5	1.0769		
44.7	63.5	1.0119		
56.1	66.4	0.9423		
68.8	69.8	0.8733		
83.6	73.4	0.8045		
100	77.1	0.7390		
Schwers, 1912				
	t	d	t	d
	0%		12.586%	
11.2	1.50584	10.95	1.35474	
19.3	1.49090	21.7	1.33693	
30.65	1.46987	30.7	1.32113	
	21.571%		39.099%	
10.9	1.26612	14.5	1.11711	
19.45	1.25308	23.1	1.10569	
29.7	1.23663	30.5	1.09548	
	50.921%		65.176%	
10.2	1.04136	10.75	0.95644	
21.9	1.02775	18.7	0.94825	
32.0	1.01505	30.3	0.93548	
	72.839%		80.478%	
11.3	0.91587	11.7	0.87860	
19.7	0.90777	22.0	0.86882	
29.8	0.89725	30.6	0.86055	
	100%			
11.3	0.79693			
21.0	0.78884			
29.3	0.78152			
Hirobe, 1925				
%	d	%	d	
	25°			
0	1.47919	38.44	1.10375	
2.35	1.44898	45.32	1.06007	
4.32	1.39267	63.53	0.94634	
11.48	1.34178	73.64		
22.42	1.23631	100	0.78522	
29.70	1.17503			
Graffunder and Heymann, 1931				
%	d			
	25°			
0	1.4702			
19.56	1.3720			
37.07	1.2701			
52.94	1.1740			
67.34	1.0700			
80.49	0.9590			
92.52	0.8525			
100	0.7850			
Burwinkel, 1914				
%	d			
	17°			
0	1.49077			
15.622	1.30805			
35.906	1.14286			
53.261	1.03118			
66.329	0.95209			
83.877	0.88760			
100	0.80942			

Scatchard and Raymond, 1938

%	mol%	\bar{d}
25°		
0	0	1.47955
3.37	8.29	1.43640
6.58	15.44	1.39796
8.65	19.71	1.37477
14.83	31.11	1.30804
16.51	33.89	1.29163
27.14	49.12	1.19656
35.91	59.23	1.12584
41.30	64.59	1.08789
59.39	79.13	0.97374
64.79	82.67	0.94561
72.76	87.33	0.90360
78.56	90.47	0.87544
84.80	93.52	0.84744
100	100	0.78562

Migal and Belotskii, 1955 (fig.)

%	\bar{d}	
	0°	20°
0	1.03	1.020
20	0.995	0.980
40	0.948	0.930
60	0.900	0.888
80	0.858	0.847
100	0.809	0.800

Guthrie, 1875

1 vol + 1 vol $D_v = -0.2488\%$

Peel, Madgin and Briscoe, 1928

1 vol + 1 vol $D_v = -0.25\%$

Drecker, 1883

%	π
25°	
0	106.7
10.33	106.3
20.84	106.4
31.21	108.0
40.56	107.6
50.52	105.4
64.28	105.6
79.30	109.1
100	113.8

Ohlholm, 1913

normality of CHCl_3	η
20°	
1	1191
0.5	1223
0.25	1227
0	1216

normality of CHCl_3	D
20°	
2	1.09
1	1.08
0.5	1.07

Lemonde, 1938

vol%	D
15°	
2	1.96
20	0.98
40	0.98
60	1.38 or 1.20
80	1.62
98	1.63

Lemonde, 1938

vol%	η
15°	
0	595
2	595
20	648
40	806
60	1048
80	1257
98	1330
100	1340

Migal and Belotskii, 1955 (fig.)						
mol%	0°	5°	10°	15°	20°	25°
100	1900	1720	1580	1420	1380	1120
80	1580	1490	1310	1180	1060	940
60	1260	1180	1040	950	880	800
20	1000	940	880	820	790	720
0	800	760	700	660	620	600
Findlay, 1909						
%	b.t.		η			
0	60.2		399			
5.78	58.5		400			
10.05	58.4		404			
10.91	58.5		406			
24.02	59.8		440			
35.28	61.5		446			
44.7	63.5		462			
56.1	66.4		468			
68.8	69.8		467			
83.6	73.4		457			
100	77.1		442			
Rodenebeck, 1879						
%	σ					
17.5°						
0.800	22.74					
0.920	24.00					
1.040	25.25					
1.160	25.82					
1.280	26.24					
1.400	26.92					
1.494	27.24					
Migal and Belotskii, 1955 (fig.)						
mol%	0°	5°	10°	15°	20°	25°
100	24.05	23.60	23.05	22.70	22.25	22.00
80	25.70	25.10	24.80	24.30	23.80	23.20
60	26.90	26.30	25.80	25.20	24.80	24.10
40	27.90	27.10	26.60	26.05	25.60	25.00
20	28.80	28.05	27.40	26.90	26.25	25.90
0	29.90	29.05	28.40	27.80	27.20	26.60

Optical and Electrical Constants				
Schwers, 1912				
t	n			
	red	n _D	blue	violet
100%				
10.8	1.36329	1.36501	1.36939	1.37295
18.7	1.36015	1.36185	1.36619	1.36966
47.5	1.34820	1.34984	1.35404	1.35748
59.9	1.34296	1.34460	1.34876	1.35271
80.478%				
8.75	1.37445	1.37626	1.38088	1.38452
24.9	1.36771	1.36944	1.37392	1.37753
30.2	1.36536	1.36711	1.37160	1.37520
40.7	1.36096	1.36249	1.36693	1.37055
72.839%				
10.05	1.37850	1.38036	1.38504	1.38888
25.0	1.37191	1.37367	1.37836	1.38204
33.0	1.36849	1.37028	1.37484	1.37850
43.6	1.36396	1.36573	1.37019	1.37384
65.176%				
6.2	1.38509	1.38714	1.39160	1.39547
17.3	1.38020	1.38211	1.38693	1.39075
36.6	1.37145	1.37331	1.37805	1.38189
50.921%				
11.0	1.39343	1.39537	1.40053	1.40463
22.4	1.38813	1.39002	1.39517	1.39922
35.8	1.38163	1.38351	1.38850	1.39346
50.0	1.37452	1.37642	1.38144	1.38535
39.099%				
10.5	1.40327	1.40539	1.41071	1.41491
24.2	1.39642	1.39849	1.40369	1.39778
31.3	1.39283	1.39486	1.39996	1.40406
45.6	1.38519	1.38729	1.39246	1.39660
21.571%				
7.3	1.42200	1.42431	1.42999	1.43445
17.4	1.41651	1.41877	1.42455	1.42896
36.5	1.40586	1.40795	1.41374	1.41813
12.586%				
11.8	1.43026	1.43251	1.43835	1.44261
24.0	1.42329	1.42556	1.43141	1.43595
37.55	1.41523	1.41754	1.42322	1.42753
48.6	1.40854	1.41081	1.41641	1.42102
0%				
10.1	1.44951	1.45206	1.45839	1.46347
25.2	1.44038	1.44290	1.44914	1.45929
43.5	1.42928	1.43176	1.43789	1.44286
61.8	1.41811	1.42051	1.42648	1.43139

Migal and Belotskii, 1955 (fig.)			
mol%	n_D	mol%	n_D
20°			
0	1.4450	60	1.3950
20	1.4300	80	1.3800
40	1.4150	100	1.3600
Philip, 1897			
%	ϵ		
18°			
100		26.09	
66.02		21.45	
39.20		15.09	
23.42		10.988	
0		4.927	
Graffunder and Heymann, 1931			
%	ϵ		
25°			
100		24.69	
92.52		22.90	
80.49		19.82	
67.34		16.14	
52.94		12.46	
37.07		9.36	
19.56		6.65	
0		4.80	
Heat constants			
Schüller, 1871			
%	U		
at room t.			
100		0.6067	
16.75		0.3348	
28.77		0.3919	
33.92		0.4130	
39.78		0.4315	
47.00		0.4539	
55.46		0.4841	
72.80		0.5331	
0		0.2337	
Drecker, 1883			
%	U		
25°			
0		0.159	
10.349		0.213	
19.939		0.261	
30.037		0.310	
40.074		0.339	
49.971		0.370	
59.958		0.401	
70.000		0.435	
79.968		0.464	
90.030		0.488	
100		0.513	
Timofeev, 1905			
%	U		
20°			
0		0.2363	
3.62		0.259	
9.81		0.298	
65.8		0.462	
100		0.5933	
%	Q dil		
initial	final		
(mole chloroform)			
100	88.1	+1277	
88.1	79.0	+989	
79.0	71.9	+742	
71.9	65.8	+517	
(mole alcohol)			
0	0.43	-209	
0.43	0.87	-1715	
0.87	1.58	-1257	
1.58	2.15	-878	
2.15	3.05	-762	
3.05	4.4	-229	
4.4	5.47	-69	
5.47	6.8	+39	
6.8	7.9	+114	
0	4.5	-874	
4.5	8.55	-48	
9.6	14.0	+249	
14.0	17.7	+306	
17.7	21.6	+342	
33.8	37.3	+324	
37.3	40.65	+299	

Hirobe, 1925

%	Q mix	%	Q mix
25°			
2.35	-92.4	38.44	+116.8
4.32	-109.2	45.32	+149.2
11.48	-87.1	63.53	+153.9
22.42	+2.1	73.64	+121.3
29.70	+58.9		

Guthrie, 1875

1 vol + 1 vol Q mix is positive.

Bussy and Buignet, 1864 - 1867

%	t	Dt
5.99	20.01	-2.50
7.16	20.00	-2.60
8.80	20.00	-2.40
11.39	20.00	-2.20
16.16	19.60	-0.90
22.44	19.80	0.00
27.83	20.10	+1.70
43.54	19.40	+4.10
53.64	18.45	+4.55
60.67	18.85	+4.65
65.85	18.50	+4.50
69.82	20.40	+4.20

50 vol% 20.10° Dt = +2.90°

Peel, Madgin and Briscoe, 1928

vol%		Dt
initial	final	
0	50	+3.7
50	67	+2.6
50	33	-1.3

Chloroform (CHCl_3) + Propyl alcohol ($\text{C}_3\text{H}_7\text{O}$)

Hirobe, 1925

%	d	Q mix
25°		
0	1.48011	-
3.32	1.42933	+107.4
9.05	1.37269	152.1
14.95	1.31190	140.2
18.95	1.27369	123.2
32.34	1.16144	36.2
33.33	1.15420	31.4
49.37	1.04483	-58.4
56.43	1.00239	-81.7
71.91	0.92036	-99.2
90.78	0.83599	-50.6
100	0.80089	-

Timofeev, 1905

% initial final		Q dil
(mole chloroform)		
100	89.5	+945
89.5	80.8	+616
24.8	23.1	-261
(mole alcohol)		
21.7	24.8	+228
18.9	21.7	+191
1.42	5.9	-747
0	1.42	-

Chloroform (CHCl_3) + Isobutyl alcohol ($\text{C}_4\text{H}_{10}\text{O}$)

Hirobe, 1925

%	d	Q mix
25°		
0	1.48011	-
9.14	1.44965	+19.2
12.64	1.34364	+21.2
28.51	1.18935	-3.6
38.63	1.15139	-51.2
63.61	0.97139	-177.6
71.67	0.91949	-208.5
88.21	0.84828	+210.8
96.83	0.83520	+108.7
100.00	0.79830	

Chloroform (CHCl_3) + Amyl alcohol ($\text{C}_5\text{H}_{12}\text{O}$)

Holmes, 1913

%	d
	25°
0	1.47998
11.09	1.3554
19.47	1.2728
26.79	1.2097
42.04	1.0961
59.87	0.9886
69.31	0.9388
100	0.80677

Chloroform (CHCl_3) + Isoamyl alcohol ($\text{C}_5\text{H}_{12}\text{O}$)

Hirobe, 1925

%	d	Q mix
	25.01°	
100	1.48010	-
95.54	1.42938	+24.3
84.34	1.30317	+37.6
65.15	1.14627	+34.5
53.54	1.06702	-33.2
44.82	1.01405	-80.4
20.95	0.91180	-132.8
10.42	0.84803	-179.7
1.74	0.81400	-115.4
0	0.80742	-

Chloroform (CHCl_3) + Decanol ($\text{C}_{10}\text{H}_{22}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f. t.	%
-40.0	6.3
-20.0	26.5
0.0	79.6
+6.88	100

Chloroform (CHCl_3) + 1-Dodecanol ($\text{C}_{12}\text{H}_{26}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
1.3	-40.0
3.9	-20.0
32.2	0.0
89.1	+20.0
100	23.95

Chloroform (CHCl_3) + 1-Tetradecanol ($\text{C}_{14}\text{H}_{30}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.6	-20.0
7.6	0.0
46.0	+20.0
75.3	30.0
100	38.26

Chloroform (CHCl_3) + 1-Hexadecanol ($\text{C}_{16}\text{H}_{34}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
1.6	0.0
19.3	20.0
43.1	30.0
72.4	40.0
100	49.62

Chloroform (CHCl_3) + 1-Octadecanol ($\text{C}_{18}\text{H}_{38}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.2	0.0
6.2	20.0
22.0	30.0
48.7	40.0
100	57.98

Chloroform (CHCl_3) + Methyl malate ($\text{C}_6\text{H}_{10}\text{O}_5$)

Walden, 1906

%	D b. t.
0.79	+0.180
1.95	0.438
3.27	0.714
5.54	1.209
7.45	1.694
11.78	2.817
14.15	3.452

Grossmann and Landau, 1910

g/100cc	(α)					
red	yellow	green	pale blue	dark blue	violet	
20°						
50.251	-0.40	0.00	+0.40	+1.19	+1.89	+2.09
25.1255	+1.31	+1.55	+2.59	+4.18	+4.78	-
12.5628	+2.07	+2.47	+3.42	+5.09	+6.05	-
4.949	+2.53	+3.23	+4.04	+5.15	+6.16	+7.17
2.487	+3.23	+4.02	+4.83	+6.03	+7.64	-

Chloroform (CHCl_3) + Ethyl malate ($\text{C}_8\text{H}_{14}\text{O}_5$)

Walden, 1906

line	(α)	c	(α)	c	(α)	c
	26.92		6.73		1.68	
g/100cc						
18°						
red	-3.9	1	-3.9	1	-3.6	1
green	-5.5	1.40	-5.3	1.37	-5.1	1.41
violet	-6.2	1.58	-6.0	1.54	-6.0	1.66

c = dispersion constant

Chloroform (CHCl_3) + Ethyl tartrate ($\text{C}_8\text{H}_{14}\text{O}_6$)

Patterson, 1905

t	d	t	d
2.00276%		8.9947%	
12.8	1.49369	18.0	1.45939
26.5	1.46803	31.8	1.43531
37.0	1.4486	38.5	1.4234
51.0	1.4218	54.0	1.3956
19.119%		39.913%	
17.3	1.4272	14.5	1.3673
36.3	1.3963	24.5	1.3538
51.0	1.3712	33.8	1.3401
60.0	1.3564	49.6	1.3173
60.036%		79.95%	
13.5	1.3114	13.7	1.2598
26.5	1.2953	25.5	1.2466
33.2	1.2870	33.5	1.2376
57.3	1.2567	56.0	1.2270

Walden, 1906

%	t	d
18.11	50	1.367
9.73	50	1.399
4.07	50	1.421
18.11	20	1.413
9.73	20	1.451
4.07	20	1.478
9.73	0	1.485
4.06	0	1.499

Winther, 1907

%	d
20°	
100	1.20435
63.037	1.29247
47.078	1.33485
23.586	1.40191
5.477	1.45876
0	1.47709

Patterson, 1905

t	(α) _D	t	(α) _D
2.00276%		8.9947%	
5.1	-6.04	14.4	-4.32
5.6	-5.98	16.5	-3.86
16.0	-3.86	24.1	-2.25
19.3	-3.22	33.4	-0.44
35.2	-0.23	38.5	+0.45
41.2	+0.65	40.3	+0.71
45.2	+1.36	46.9	+1.86
52.7	+3.05		
19.119%		39.913%	
15.7	-3.85	7.7	-4.20
15.8	-3.79	10.7	-3.51
22.5	-2.39	19.0	-1.77
34.3	-0.18	31.1	+0.55
37.3	+0.33	38.4	+1.76
42.0	+1.15	45.9	+2.98
48.0	+2.16	49.7	+3.58
51.4	+2.77	52.9	+4.12
60.036%		79.95%	
5.6	-2.04	4.5	+1.45
6.5	-1.85	5.9	1.63
10.6	-1.03	10.0	2.30
13.0	-0.58	11.3	2.58
16.0	-0.01	18.0	3.53
18.5	+0.45	29.3	5.19
31.3	+2.52	34.1	5.77
40.1	+3.85	39.8	6.43
45.5	+4.63	45.8	7.12
50.0	+5.26	52.3	7.99
54.7	+5.92		

Walden, 1906

%	t	(α) _D
18.11	50	+1.06
9.73	50	+1.26
4.07	50	+2.32
18.11	35.5	0
9.73	37	0
4.06	36	0
18.11	20	-3.44
9.73	20	-3.07
4.07	20	-3.19
9.73	0	-6.75
4.06	0	-6.76

Winther, 1907

%		$(\alpha)_D$		
20°				
	63.037		+1.09	
	47.078		-0.81	
	23.586		-2.65	
	5.477		-3.09	
spectral				
		(α)		
lines	63.037%	47.078%	23.586%	5.477%
20°				
red	+1.88	+0.41	-1.03	-1.19
yellow	+1.09	-0.81	2.65	3.09
green	-0.55	2.88	5.37	5.83
pale blue	5.84	9.38	12.69	13.66
dark blue	9.39	13.42	17.08	17.94

Chloroform (CHCl_3) + Chloral hydrate ($\text{C}_2\text{H}_3\text{O}_2\text{Cl}_3$)

Speyers, 1902

mol%	f. t.	t	d sat. sol.
2.67	0.0	0.0	1.529
4.23	12.5	16.3	1.505
31.93	27.7	34.4	1.565
100.0	44.0	44.6	1.615
100.0	44.4		
100.0	46.3 sic		

Chloroform (CHCl_3) + Cyclohexanol ($\text{C}_6\text{H}_{12}\text{O}$)

Weissenberger and Schuster, 1924

mol%	p	mol%	p
20°			
66.7	54	33.3	123
57.5	74	28.6	133
50.0	92	25.0	140
40.3	111	20.0	145
		0	160

mol%	η (water = 1)	σ
20°		
100	14.5	0.474
66.7	3.6	0.439
57.5	2.4	0.424
50.0	1.9	0.414
40.3	1.3	0.404
33.3	1.2	0.399
28.6	1.16	0.394
25.0	1.13	0.391
20.0	1.10	0.391
0	0.58	0.365

Chloroform (CHCl_3) + o-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Wojnov, 1925

mol%	p
15°	
66.7	59.5
50.0	77.2
40.0	87.1
33.3	94.3
28.6	99.5
25.0	104.5
22.2	107.5

mol%	η (water =1)	σ
15°		
66.7	3.15	0.432
50.0	2.14	0.412
40.0	1.36	0.404
33.3	1.27	0.399
28.6	1.06	0.397
25.0	1.05	0.395
22.2	1.02	0.394

Chloroform (CHCl_3) + m-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Wojnov, 1925

mol%	p
15°	
66.7	59.5
50.0	77.2
40.0	87.1
33.3	94.3
28.6	99.5
25.0	104.5
21.8	107.5

mol%	η (water = 1)	σ
15°		
66.7	4.95	0.446
50.0	3.03	0.424
40.0	2.33	0.412
33.3	1.87	0.406
28.6	1.44	0.400
25.0	1.11	0.398
22.2	0.79	0.396

Chloroform (CHCl_3) + p-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Henke, 1925

mol%	p	η (Water = 1)	σ
15°			
66.7	57.0	4.61	0.455
50.0	74.3	2.58	0.441
40.0	85.1	1.70	0.435
33.3	91.7	1.36	0.432
28.6	95.1	1.25	0.432
25.0	98.1	1.03	0.431
22.2	99.9	0.95	0.431

Chloroform (CHCl_3) + Menthol ($\text{C}_{10}\text{H}_{20}\text{O}$)

Castiglioni, 1934

%	d	η
20°		
0	1.4835	581.97
10	1.3919	686.13
20	1.3098	841.30
30	1.2395	1134.50
40	1.5743	1650.00
50	1.1131	2627.80
60	1.0639	4134.30

Chloroform (CHCl_3) + Benzyl alcohol ($\text{C}_7\text{H}_8\text{O}$)

Gordon, 1931

vol%	d
23.5° - 24°	
100	1.0468
75	1.1591
65	1.2634
50	1.2692
35	1.3345
25	1.3780
0	1.4843

Lecat, 1949

Dichlorobrommethane (CHCl_2Br) (b.t. = 90.1) + Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	40	63.75	+3.4 (34%)
Ethyl alcohol	$\text{C}_2\text{H}_6\text{O}$	78.3	28	75.5	+0.9 (36%)
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	97.2	19.5	86.5	-2.1 (19%)
Isopropyl alcohol	$\text{C}_3\text{H}_8\text{O}$	82.4	38	79.3	-2.8 (27%)
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	108.0	11	89.25	-5.3 (15%)
tert. Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	82.45	38	80.0	-4.2 (10%)
Allyl alcohol	$\text{C}_3\text{H}_6\text{O}$	96.85	17.5	85.85	-2.24 (19%)

Bromoform (CHBr_3) + Methyl alcohol (CH_4O)

Kireev and Sitnikov, 1944

mol%	P	P_1	P_2
L	V	35°	
0	0	9.8	0
0.1	71.4	34.7	24.8
2.8	88.1	82.13	72.3
11.0	92.3	124.2	114.6
18.9	93.5	147.7	138.7
37.7	94.3	154.8	146.0
40.1	94.3	155.4	146.5
47.0	94.4	158.4	149.5
50.2	94.7	160.6	152.1
57.6	94.7	164.7	156.0
65.5	95.2	169.4	161.3
66.7	95.4	169.2	161.4
71.8	95.6	173.8	166.2
76.7	96.2	178.3	171.8
84.0	97.0	186.7	179.8
88.8	97.6	190.5	185.9
92.0	98.2	196.6	193.1
94.8	98.8	202.1	199.7
97.0	99.3	205.2	203.8
100	100	208.3	208.3

Öholm, 1913

normality of bromoform	d	η	diffusion ratio
20°			
100%	2.82 - 2.86	2000	-
1	0.9808	696	1.63
0.5	0.884	660	1.67
0.25	0.833	615	-
0	0.795	596	-

Kireev and Sitnikov, 1944

mol%	d	n_D
20°		
0	2.8907	1.59733
15.01	2.7354	1.57836
29.83	2.5522	1.55771
46.90	2.2904	1.51985
58.26	-	1.49220
65.62	1.9155	1.47099
65.75	1.9136	-
71.62	1.7694	1.45163
73.19	1.7311	-
83.16	1.4374	1.40977
83.79	1.4199	-
88.37	1.2621	-
91.93	1.1308	1.37098
92.09	1.1239	-

Bromoform (CHBr_3) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Kireev and Sitnikov, 1944

mol%		P	P ₁	P ₂
L	V			
0	0	9.8	9.8	0
4.8	75.9	39.8	9.6	30.2
6.4	77.6	42.0	9.4	32.6
18.9	86.7	69.2	9.2	60.0
21.1	87.3	69.1	8.8	60.3
37.8	90.0	78.2	7.8	70.4
54.0	90.2	81.9	8.0	73.9
58.0	90.6	82.2	7.7	74.5
64.8	91.2	84.0	7.4	76.6
68.2	91.4	85.5	7.3	78.2
84.6	94.8	92.9	4.8	88.1
98.2	99.4	101.6	0.6	101.0
100	100	102.7	0	102.7

Ohlrm, 1913

normality of bromoform	d	η	diffusion ratio
20°			
100%	2.82 - 2.86	2000	-
1	0.9779	1316	0.835
0.5	0.890	1294	0.843
0.25	0.833	1250	-
0	0.790	1201	-

Kireev and Sitnikov, 1944

mol%	d	n_D
20°		
0	2.8910	1.59733
10.60	2.7375	1.58236
22.79	2.5476	1.55958
38.17	2.2811	1.52740
48.70	2.0878	1.50572
57.79	1.8945	1.48367
64.28	1.7525	1.46784
69.93	1.6219	1.45335
70.10	1.6192	1.45339
78.30	1.4139	1.43015
84.71	1.2432	1.41142
88.86	1.1269	1.39840
95.55	0.9302	1.37684
96.40	0.9046	1.37412
100	0.7909	1.36170

Ampola and Manuelli, 1895

%	f.t.	%	f.t.
0	+7.80	4.75	3.735
0.12	7.49	5.57	3.39
0.41	6.77	6.95	3.05
0.83	6.115	8.77	2.565
1.31	5.555	10.61	2.38
1.90	5.095	13.68	1.85
2.78	4.57		

Lecat, 1949

Bromoform (CHBr_3) (b.t. = 149.5) + Varia

	2nd Comp.		Az	or	Dt mix
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	$\text{C}_2\text{H}_6\text{O}_2$	197.4	6.5	146.45	142 (6.5%)
Propoxy- glycol	$\text{C}_5\text{H}_{12}\text{O}_2$	151.35	16	147.15	+25 (16%)
Ethylene chlorhydrin	$\text{C}_2\text{H}_5\text{OCl}$	128.6	54	127.4	+0.2 (82%)
Dichlor ethanol	$\text{C}_2\text{H}_4\text{OCl}_2$	146.2	45	143.0	+0.3 (40%)

Bromoform (CHBr_3) + Methyl malate ($\text{C}_6\text{H}_{10}\text{O}_5$)

Grossmann and Landau, 1910

g/100cc		(α)		pale	dark
red	yellow	green	blue	blue	violet
20°					
50.506	-0.04	+0.18	+0.53	+1.52	+2.16 +2.77
25.253	+1.58	+2.49	+3.33	+4.67	+5.43 -
12.6265	+2.46	+3.80	+5.15	+6.34	+7.37 -
4.865	+5.14	+6.17	+7.61	+9.25	+10.07 +10.69
2.4325	+2.47	+3.29	+4.52	+5.76	+6.58 -

Bromoform (CHBr_3) + Ethyl tartrate ($\text{C}_8\text{H}_{16}\text{O}_4$)

Patterson and Thomson, 1908

t	d	t	d
0%		7.0809%	
19.07	.8924	19.04	2.62003
21.17	2.8869	22.56	2.61179
25.75	2.8750	30.03	2.59402
9.9976%		30.915%	
12.9	2.5169	19.25	2.00405
31.0	2.4751	22.6	1.99788
52.0	2.4270	32.17	1.9808
73.0	2.3780		

%	d	(α) _D
20°		
0	2.8899	0.20
7.0809	2.61778	0.93
9.9976	—	1.19
30.915	2.0027	3.09

t	(α) _D	t	(α) _D
7.0809%		9.9976%	
16.0	0.47	16.9	0.86
20.5	0.99	22.6	1.43
24.8	1.51	38.8	3.18
39.8	3.17	50.6	4.34
		59.1	5.11
30.915%		76.9	6.76
14.5	2.42		
16.9	2.76		
28.9	4.11		

Lowry and Dickson, 1915

%	6708 Å	5893 Å	(α) 5780 Å	5461 Å	4358 Å
20°					
100	+6.69	7.45	7.52	7.50	5.62
20	+1.84	+0.83	+0.63	-0.30	—

Carbon tetrachloride (CCl_4) + Methyl alcohol (CH_3O)

Heterogeneous equilibria .

Thorpe, 1879

b. t.	% in V
749.5mm	
55.5 - 55.8	21.95
55.8 - 56.2	23.44
56.2 - 56.5	24.61
56.5 - 57.1	26.13
57.1 - 57.8	29.36
760.7mm	
57.8 - 58.8	31.96
58.8 - 59.5	35.30
59.5 - 60.3	39.66
60.3 - 61.1	44.63
61.1 - 61.8	49.91
61.8 - 62.8	56.53
62.8 - 63.8	67.87
63.8 - 64.8	83.04
64.8 - 65.5	95.59
65.6 - 65.6	100
Az : 78.1%	55.6 - 55.9°

Haywood, 1899

%	b. t.	%	b. t.
765.1 - 765.3 mm			
100	65.2	40.6	56.6
93.9	64.0	38.5	56.475
87.2	62.7	31.8	56.2
75.0	60.5	24.9	56.0
64.0	58.85	20.7	55.97
59.6	58.3	18.4	55.95
54.9	57.8	15.0	56.0
51.6	57.45	11.1	56.1
48.6	57.2	7.4	56.35
45.6	56.9	5.9	56.6
42.1	56.7	0.0	77.2

Young, 1903

%	b. t.
0	76.75
20.41	55.70 Az
100	64.7

Lecat, 1949

%	b. t.	Dr mix
0	76.75	
20.6	55.65	Az
30	-	
100	64.65	-0.6

Fontell, 1936.

%	p	%	p
20°			
100	96.1	23.0	159.9
88.8	110.4	14.5	160.2
87.3	111.8	10.6	160.1
69.0	132.2	8.8	159.6
67.1	133.9	7.5	159.6
66.4	134.6	4.9	158.6
51.9	147.1	3.2	157.0
51.1	148.1	2.3	155.4
50.3	148.4	0.40	140.6
40.1	154.8	0.03	94.5
36.4	156.3	0	90.3
24.9	159.6		

%	p	p ₁	p ₂
20°			
100	96.1	0.0	96.1
96	117.2	24.4	92.8
90	135.5	47.1	88.4
86	143.9	58.0	85.9
80	152.0	69.0	83.0
76	155.0	73.1	81.9
70	157.5	76.9	80.6
66	158.7	78.8	79.9
60	159.9	(80.9)	(79.0)
56	160.0	(81.0)	(78.1)
50	160.1	(83.0)	(77.1)
46	160.2	(83.7)	(76.5)
40	160.1	(84.6)	(75.5)
36	160.0	(85.2)	(74.8)
30	159.9	85.2	73.7
26	159.5	86.5	73.0
20	158.6	87.1	71.5
16	157.6	87.5	70.1
10	155.2	88.3	66.9
6	151.0	89.1	61.9
0	90.3	90.3	0.0

Scatchard, Wood and Mochel, 1946

mol%	p
L	V
25°	
0.4880	0.4838
	205.30
35°	
1.69	32.97
1.89	33.74
13.49	46.30
35.60	49.15
47.76	50.30
49.39	50.56
65.57	53.02
79.12	57.92
91.20	70.24
45°	
0.4866	0.5231
	500.13
55°	
2.54	36.19
5.79	36.39
14.93	49.81
36.47	52.84
48.93	54.31
49.46	54.38
64.48	56.86
79.03	61.87
90.87	73.37
	580.66
	591.16
	716.95
	741.36
	745.60
	745.72
	744.54
	724.28
	658.37

Scatchard and Ticknor, 1952

mol %	p
L	V
35°	
55.87	51.40
	325.68
55°	
2.34	36.92
3.43	39.26
5.25	43.26
17.34	50.84
54.50	55.35
86.99	67.24
	568.91
	592.60
	644.13
	721.56
	746.30
	687.30

Hipkin and Myers, 1954

L	mol%	b. t.
760mm		
0.0	0.0	76.7
0.2	2.0	76.1
0.2	2.7	75.85
0.4	12.7	72.35
1.3	24.15	67.6
1.7	26.4	66.85
3.0	38.3	62.0
5.05	44.5	59.4
10.7	49.0	57.2
12.4	50.0	56.95
24.8	52.2	56.25
40.1	53.65	55.8
45.25	54.1	55.75
49.8	54.5	55.75
50.5	54.85	55.7
55.0	55.2	55.65
56.55	55.2	55.7
59.65	55.8	55.7
60.3	56.1	55.7
62.5	56.3	55.755
67.6	57.6	55.75
72.5	59.1	56.0
72.7	59.5	56.0
76.4	60.5	56.35
81.3	63.0	56.75
83.8	64.9	57.1
86.8	67.7	57.7
88.3	69.55	58.2
89.7	71.6	58.6
91.75	75.3	59.5
93.8	80.3	60.4
94.8	82.3	60.85
96.2	86.4	61.8
97.9	91.0	62.8
98.6	93.9	63.5
99.3	96.65	64.1
99.7	98.8	64.5
99.9	99.5	64.6
100	100	64.7

Hammond and Stokes, 1955

c	D	c	D
25°			
4.16	2.227	11.20	2.100
4.49	2.213	16.92	1.995
7.73	2.162	18.20	1.970
9.46	2.119	18.80	1.963
10.35	2.138		

c = g CCl₄ in 100cc

Tichacek, Kmak and Drickamer, 1956

mol %	D therm.
40°	
20	-2.8
50	-4.9
80	-3.0

D negative means CH₃O going to the hot wall.

Properties of phases.

Young, 1903

20.41% (Az) d⁰ = 1.35236

Harms, 1938

mol%	d	
	6°	30°
0.000	1.62097	1.57449
2.793	1.61115	1.56463
4.668	1.60440	1.55797
8.889	1.58872	1.54265
13.169	1.57210	1.52642
22.170	1.53410	1.48943
33.681	1.47830	1.43528
41.665	1.43382	1.39217
54.320	1.35077	1.31156
63.496	1.27834	1.24132
82.619	1.07891	1.04800
97.017	0.86958	0.83633
100.000	0.80436	0.78182

Pesce and Evdokimov, 1940

%	d	
	25°	
0	1.58440	
14.301	1.38464	
22.963	1.28647	
33.862	1.18107	
45.646	1.08444	
59.689	0.98804	
77.440	0.88797	
100	0.78658	

Scatchard, Wood and Mochel, 1946

wt%	mol%	d
25°		
0	0	1.58452
2.96	12.76	1.53764
6.40	24.72	1.48731
13.26	42.33	1.39691
17.36	50.22	1.34781
25.79	62.52	1.25715
25.97	62.74	1.25526
38.74	75.23	1.13928
39.27	75.64	1.13472
59.87	87.75	0.98697
100	100	0.78654

Jones, Bowden, Yarwold and Jones, 1948

%	d
25°	
0	1.5844
5	1.5085
10	1.4398
15	1.3771
20	1.3228
40	1.1320
50	1.0529
60	0.9887
80	0.8758
100	0.7865

Scatchard and Ticknor, 1952

mol%	d
35°	
0.0	1.58437
26.886	1.37052
51.242	1.17715
73.074	1.00264
100.0	0.78653

Jones, Bowden, Yarnold and Jones, 1948

%	η	%	η
25°			
0	902	40	746
5	858	50	702
10	854	60	665
15	846	80	599
20	831	100	552

Sette, 1950

mol%	$d/f^2 \cdot 10^7$
0	580
6.5	400
10	350
20	257
30	190
40	134
50	100
70	68
100	40

d = amplitude of the ultrasound absorption coefficient

f = frequency.

Optical and electrical Properties.

Pesce and Evdokimov, 1940

%	n_{5875}
25°	
0	1.45725
14.301	1.42423
22.963	1.40821
33.862	1.39100
45.646	1.37524
59.689	1.36232
77.440	1.34311
100	1.32643

Scatchard and Ticknor, 1952

mol%	n_D
35°	
0.0	1.4572
26.886	1.4221
51.242	1.3903
73.074	1.3620
100.0	1.3267

Hipkin and Myers, 1954

mol%	n_D	mol%	n_D
20°			
0	1.4602	60	1.4090
10	1.4549	70	1.3935
20	1.4483	80	1.3768
30	1.4407	90	1.3546
40	1.4321	100	1.3286
50	1.4216		

Shakhparonov and Shlenkina, 1954

mol%	n_D	I	D
	20°	19° - 20°	
0	1.45981	1	0.045
21	1.44667	2.26	0.022
41	1.43182	3.82	0.014
50	1.42069	3.74	0.015
59	1.40940	3.00	0.018
84	1.36869	1.60	0.030
100	1.32846	0.56	0.071

D = degree of the optical depolarization

I = relative intensity of the molecular light dispersion (at right angle)

Fontell, 1936.

%	(α) _D
20°	
100	68°31'
74.04	64°27'
62.84	62°26'
42.82	58°18'
33.39	56°3'
27.17	54°24.5'
13.62	50°18'
7.39	48°4'
4.57	46°57'
1.76	45°46'
1.00	45°26'
0	44°58'

Schupp, 1949 (fig.)

mol%	total polarization
20°	
0	8.80
20	13.40
40	21.00
60	27.70
80	30.40
100	31.60

Hoffmann, 1943

molarity	molar extinction .10 ⁵
21° - 22°	
7.789	202
2.998	492
1.018	1204
0.3580	2676
0.1161	5317
0.0957	5730
0.0485	7160
0.0250	7712
0.0250	7980
0.0219	7980
0.0	8000

Harms, 1938

mol%	ϵ	
	6°	30°
0.000	2.263 ₆	2.216 ₃
2.793	2.342 ₈	2.298 ₇
4.668	2.404 ₉	2.360 ₇
8.889	2.592 ₁	2.532 ₇
13.169	2.882 ₅	2.777 ₅
22.170	3.883 ₂	3.603 ₁
33.681	5.994	5.350
41.665	8.263	7.499
54.320	12.57	11.364
63.496	16.90	15.067
82.619	27.53	23.44
97.017	-	-
100.000	33.0	30.9

Heat constants.

Scatchard, Ticknor, Goates and Mc Cartney, 1952

vol%	Q mix*	vol	Q mix*
	(cal/cc)		(cal/cc)
20°			
5.64	0.78	22.43	+0.74
6.54	0.78	47.40	+0.28
9.93	0.85	49.00	+0.25
11.33	0.83	74.65	-0.11
21.64	0.70	75.45	-0.17

* In the paper, there is an error in this column heading.

Timofeev, 1905

%		Q dil
initial	final	
(mole alcohol)		
0	2.7	-741
2.7	5.3	-111
5.3	7.7	-51.3
7.7	10.0	-22
10.0	12.4	-25
(mole CCl ₄)		
100	89.3	+121
89.3	80.5	+73.6

Carbon tetrachloride (CCl_4) + Ethyl alcohol
($\text{C}_2\text{H}_6\text{O}$)Heterogeneous equilibria.

Haywood, 1899

%	b. t.	p	%	b. t.	p
100.0	78.9	768.8	28.1	65.8	768.2
87.7	75.85	768.8	20.4	65.55	768.3
73.1	72.4	769.0	17.3	65.5	768.4
57.8	69.4	768.9	11.4	65.6	768.4
50.7	68.2	768.9	8.9	65.8	768.0
46.7	67.6	768.9	5.3	66.5	767.9
45.9	67.5	768.3	2.5	68.5	768.4
39.8	66.8	768.4	0.0	77.2	767.7
34.1	66.225	768.3			

Schreinemakers, 1904

%	p			
	34.8°	50°	60°	66°
0	173	312	446	544
2.57	221	413	601	741
7.02	225	428	630	780
5.75	226	430	637	788
23.31	223	427	630	782
28.32	220	421	630	782
41.75	206	403	600	752
51.14	193	381	571	716
56.13	187	369	554	700
60.94	179	355	534	677
72.87	156	317	487	614
79.98	142	292	453	576
89.77	122	257	404	520
100	103	223	354	462

%	b. t.		
	200mm	380mm	760mm
0	38.5	55.4	76.4
2.57	32.5	47.8	66.8
7.02	32.1	47.1	65.2
5.75	32.1	47.0	64.9
23.31	32.3	47.2	64.9
28.32	32.7	47.5	65.2
41.75	34.1	48.6	66.3
51.14	35.55	49.9	67.6
56.13	36.2	50.7	68.1
60.94	37.3	51.6	69.1
72.87	40.0	54.1	71.5
79.98	41.9	55.3	72.9
89.77	44.7	58.5	75.4
100	47.8	61.5	78.1

Burwinkel, 1914

t	p						
	0	20.15	33.92	49.69	66.66	89.24	100%
0	33	40	39	34	29	21	13
10	56	71	69	66	51	40	24
20	92	120	117	108	93	72	45
30	144	193	189	176	148	113	79
40	213	296	292	273	238	184	132
50	311	460	448	406	356	295	226
60	447	670	666	618	541	444	359
70	618	-	-	-	-	-	-

King and Smedley, 1924

vol%	p		vol%	p
	20°			
0	90		50	103
10	111		70	87
20	112		80	75
30	110		90	60
40	108		100	44

Tyrer, 1912

% L		b. t.	
		V	
745mm			
100	100	77.91	
90	60	74.82	
80	45.4	72.44	
70	35.3	70.25	
60	28.0	68.35	
50	23.2	66.04	
40	20.6	65.32	
30	18.5	64.42	
20	16.8	63.88	
10	12.9	64.30	
0	0	75.92	

Az = (15.8%) 63.86°

Hill, 1912

Az = 65.2° 16.4%

Lecat, 1949

%	b.t.	Dt mix
0	76.75	
15.85	65.08	Az
16	-	-2.8
100	78.3	

Barker, Brown and Smith, 1953

L	mol%	V	P
45°			
4.59	21.78	328.31	
10.15	26.49	342.23	
19.24	29.81	348.98	
29.12	31.78	350.47	
39.50	33.56	350.47	
40.69	33.69	350.51	
51.55	35.77	346.88	
60.95	38.23	339.65	
72.64	43.35	321.69	
83.62	52.69	286.53	
89.84	62.44	253.77	
96.44	81.37	205.65	
97.88	87.90	192.73	
65°			
5.17	23.12	678.54	
10.39	29.87	721.28	
19.77	34.27	748.32	
29.60	37.00	757.36	
39.13	39.03	759.79	
40.07	39.08	760.82	
59.76	41.59	756.18	
59.95	44.24	745.46	
69.95	48.78	720.63	
70.75	49.17	716.86	
71.23	49.42	716.91	
82.55	57.94	657.86	
89.39	67.30	595.71	
95.96	83.27	508.51	
97.63	89.25	481.24	

Dolique, 1935

t	P ₂	P ₁
21	108.1	121
29	156.1	168.7
46.5	341.3	303.7
53.5	457.1	462.9
57.5	546.6	551
60.8	625.9	630.3
63.15	702.1	704.1
64.25	738.5	739.2
65.25	764.3	765.4
66	785	785.3
18.85% (Az)	66° (770mm)	

Wyatt, 1929 (fig.)

mol%	f.t.	mol%	f.t.
100	-117	40	-42
90	-119 E	30	-36
80	-86	20	-26
70	-64	10	-24
60	-58	0	-22
50	-46		

Vieth, 1929

%	f.t.
73.6	-58.5
68.3	-52.5
50.9	-39
49.2	-38
42.3	-35
29.2	-30

C.S.T. : below -39°

Hammond and Stokes, 1955

c	D	c	D
25°			
4.34	1.469	21.40	1.387
10.72	1.445	23.54	1.364
17.92	1.400		

c = g CCl₄ in 100cc

Hammond and Stokes, 1956.

lower cell compartement	upper cell compartement	D
25°		
8.68	0	1.472
21.40	0	1.447
35.76	0	1.401
40.99	0	1.384
47.08	0	1.359
63.16	0	1.311
84.57	37.90	1.027
89.46	37.90	0.996
95.90	37.90	0.993
92.34	65.32	0.857
113.80	77.43	0.732
129.32	101.62	0.601
157.58	98.96	0.666
157.25	119.92	0.709
158.10	138.12	0.764
157.98	139.40	0.773
158.24	142.56	0.841

Properties of phases.

Findlay, 1909

%	b.t.	d t d b.t.
0	75.6	1.4838
4.58	65.1	1.4345
6.71	64.5	1.4069
9.65	64.0	1.3693
20.96	63.8	1.2417
30.2	64.2	1.1539
36.6	64.8	1.0990
58.8	67.7	0.9414
73.0	70.5	0.8618
100	77.1	0.7390

Hill, 1912

%	d
0°	
0	1.63165
16.050	1.40234
16.059	1.40006
15.059	1.40141 sic
16.173	1.39962
16.046	1.40142
100	0.80625

Burwinkel, 1914

%	d
17°	
0	1.60446
15.557	1.38551
33.920	1.19968
50.307	1.07300
66.659	0.96988
84.241	0.87802
100	0.80942

King and Smedley, 1924

vol%	d	vol%	d
20°			
0	1.594	60	1.113
10	1.513	70	1.002
20	1.433	80	0.949
30	1.353	90	0.875
40	1.273	100	0.789
50	1.192		

Krchma and Williams, 1927

mol%	d
25°	
0	1.5835
10	1.5325
25	1.4491
40	1.3540
50	1.2833
100	0.7862

Hedestränd, 1929

mol%	d
25°	
0	1.5835
10	1.5325
25	1.4491
40	1.3540
50	1.2833

Graffunder and Heymann, 1931

mol%	d
25°	
100	0.7850
71.27	1.1035
52.45	1.2650
29.26	1.4250
15.48	1.5065
0	1.5835

Harms, 1938

mol%	d	d
	6°	30°
0	1.62097	1.57449
1.857	1.61137	1.56487
3.437	1.60325	1.55685
5.593	1.59215	1.54598
8.372	1.57749	1.53171
16.681	1.53202	1.48748
26.423	1.47467	1.43196
35.382	1.41761	1.37681
43.031	1.36503	1.32604
53.026	1.28992	1.25346
59.429	1.23762	1.20300
77.394	1.07006	1.04099
95.848	0.85659	0.83435
100	0.80130	0.78077

Campbell and Miller, 1047 (fig.)

mol%	d	mol%	d
25°			
100	0.78	61	1.19
97	0.825	58	1.24
95	0.85	52	1.28
90	0.92	42	1.34
86	0.96	27	1.45
80	1.025	0	1.59
72	1.08		

Jones, Bowden, Yarnold and Jones, 1948

%	d	%	d
25°			
0	1.5844	40	1.1313
5	1.5069	50	1.0522
10	1.4378	60	0.9877
15	1.3752	80	0.8746
20	1.3195	100	0.7851

Barker, Brown and Smith, 1953

mol%	d	mol%	d
25°			
0.00	1.58429	54.33	1.25102
5.16	1.55779	60.28	1.20361
10.83	1.52845	64.62	1.16671
14.90	1.50658	69.69	1.12152
19.25	1.48245	76.62	1.05527
25.45	1.44660	80.38	1.01687
29.70	1.42133	85.47	0.96217
32.88	1.40134	89.19	0.91999
38.36	1.36619	94.59	0.85506
44.12	1.32638	100.00	0.78511
44.99	1.28451		

Peel, Madgin and Briscoe, 1928

1 vol + 1 vol Dv = 0.1%

Sacher, 1940

mol%	d	sound velocity (m/s)	$\pi \cdot 10^{12}$ (dyn./cm ²)
0	1.5985	943.3	70.31
4.104	.5776	938.7	71.92
8.392	.5554	938.3	78.03
16.320	.5115	942.0	74.39
28.630	.4408	951.1	76.73
41.058	.3600	967.8	78.44
49.696	.2979	982.1	79.88
64.735	.1758	1015.6	82.46
74.735	.0860	1043.9	84.49
85.412	0.97196	1085.8	87.34
92.642	.88646	1121.5	89.69
100.000	.79175	1168.7	92.47

Sette, 1950

mol%	a/f ² · 10 ¹⁷
0	530
10	380
20	250
30	170
40	130
50	100
60	88
80	70
100	55

a = amplitude of the ultrasound absorption coefficient.

f = frequency.

Findlay, 1909

%	b.t.	η at b.t.
0	75.6	499
4.58	65.1	518
6.71	64.5	521
9.65	64.0	520
20.96	63.8	530
30.2	64.2	530
36.6	64.8	526
58.8	67.7	510
73.0	70.5	490
100	77.1	442

Dolian and Briscoe, 1937

mol%	η
25°	
100	1070
93.7	1070
86.9	1070
79.5	1050
67.0	1020
52.7	980
35.8	940
15.7	890
8.3	890
0	920

Jones, Bowden, Yarnold and Jones, 1948			
%		n	
25°			
0		902	
5		872	
10		886	
15		915	
20		947	
40		1037	
50		1064	
60		1079	
80		1091	
100		1093	
Wolf, 1943			
mol%		σ	
20°			
0		28.03	
10		27.33	
25		26.49	
50		25.36	
75		24.19	
90		23.15	
100		22.04	
King and Smedley, 1924			
vol%		n_D	
20°			
30		1.4290	
10		1.4515	
Krchma and Williams, 1927			
mol%		n_D	
25°			
0		1.45724	
10		1.45106	
25		1.44082	
40		1.42926	
50		1.42042	
100		1.35894	
Campbell and Miller, 1947 (fig.)			
%		n_c	
25°			
100		1.359	
91		1.362	
82		1.368	
72		1.372	
65		1.380	
55		1.385	
45		1.395	
Barker, Brown and Smith, 1953			
mol%		n_D	
25°			
0.00		1.4578	
5.16		1.4540	
10.83		1.4504	
14.90		1.4477	
19.25		1.4447	
25.45		1.4402	
29.70		1.4371	
32.88		1.4348	
38.36		1.4303	
44.12		1.4256	
49.99		1.4201	
Hoffmann, 1943			
N		molar extinction	
21.6°			
6.150		0.00220	
4.316		0.00321	
4.287		0.00327	
4.259		0.00315	
4.213		0.00334	
2.965		0.00449	
1.885		0.00677	
1.687		0.00703	
1.601		0.00741	
1.206		0.00954	
1.092		0.01036	
1.004		0.01070	
0.7273		0.01368	
		by mol ⁻¹ cm ⁻¹	
0.5053		0.01831	
0.3193		0.02469	
0.2192		0.03170	
0.1984		0.03363	
0.1803		0.03556	
0.11058		0.04528	
0.03766		0.05774	
0.02403		0.05968	
0.0229		0.05902	
0.0136		0.06322	
0.0		0.0606	

Harms, 1938

mol%	ϵ	
	6°	30°
0	2.264	2.216
1.857	2.313	2.272
3.437	2.354	2.318
5.593	2.426	2.385
8.372	2.530	2.485
16.681	3.093	2.948
26.423	4.344	3.941
35.382	6.279	5.494
43.031	8.419	7.534
53.026	11.47	10.78
59.429	14.05	13.69
77.394	20.12	19.35
0	28.0	24.4

Krchma and Williams, 1927

mol%	ϵ	
	25°	
0	2.230	
10	2.560	
25	3.74	
40	5.45	
50	7.05	
100	25.2	

Hedestrand, 1929

mol%	ϵ	
	25°	
0	2.230	
10	2.560	
25	3.74	
40	5.45	
50	7.05	

Graffunder and Heymann, 1931

mol%	ϵ	
	25°	
0	2.276	
15.48	2.939	
29.26	4.45	
52.45	9.40	
71.27	14.71	
100	24.69	

Heat constants .

Peel, Madgin and Briscoe, 1928

% initial		% final	Dt
0		50	-0.4
50		67	+0.7
50		33	-0.8

Brown and Fock, 1955

mol%	Q mix	
	45.0°	
53.7	122.1	
55.0	114.7	
60.5	88.0	
67.1	65.2	

Tyrer, 1912

%	Q vap (cal/g)
100	200.3
90	141.8
80	120.3
70	106.0
60	95.5
50	88.1
40	83.2
30	80.9
20	77.5
10	64.2
0	46.89

Carbon tetrachloride (CCl_4) + Propyl alcohol
($\text{C}_3\text{H}_8\text{O}$)

Carley and Bertelsen, 1949

b. t.	L	mol%	V
97.19	100		100
90.8	94.2		74.7
84.5	85.9		55.0
78.3	70.0		36.7
75.8	55.9		29.3
74.7	47.8		26.1
73.9	31.7		21.8
73.4	18.2		18.2
73.6	14.9		16.9
74.2	5.0		10.5
76.75	0		0

Holley and Weaver, 1905

%	b. t.	
0	76.7	
11.80	72.6	Az
100	95.5	

Kolossofski and Theodorowitsch, 1935

%	b. t.	
0	76.25	
-	73.4	Az
100	97.25	

Lecat, 1949

%	b. t.	Dt mix
0	76.75	
11.5	73.1	Az
12	-	
100	97.2	-2.5

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5093	903
10	1.4437	946
15	1.3810	1012
20	1.3271	1089
40	1.1427	1409
50	1.0654	1554
60	1.0017	1667
80	0.8902	1880
100	0.8015	2004

Rehfeld, 1955

mol%	d	v m/sec	$\pi \cdot 10^{12}$ cm ² /dyn.
18°			
0	1.600	942.80	70.321
2.3387	1.5862	940.80	71.227
4.9554	1.5702	940.22	72.042
9.3823	1.5422	943.22	72.888
18.753	1.4792	954.46	74.212
24.324	1.4432	962.62	74.773
34.458	1.3728	980.87	75.713
48.910	1.2657	1115.9	76.556
63.615	1.14919	1063.7	76.904
81.590	0.99502	1140.7	77.234
94.940	0.86542	1218.3	77.847
100	0.80377	1224.6	82.960

v = sound velocity

Denzler, 1945

%	n_D	%	n_D
25°			
100	1.3839	44.2	1.4126
94.0	1.3859	39.8	1.4160
89.9	1.3879	34.4	1.4199
83.7	1.3906	29.6	1.4237
79.1	1.3926	24.9	1.4275
74.0	1.3953	20.0	1.4325
67.4	1.3988	15.1	1.4375
65.2	1.4004	10.3	1.4433
59.2	1.4033	5.4	1.4490
52.1	1.4076	0	1.4574
48.2	1.4101		

Kolossofski and Theodorowitsch, 1935

Q vap Az = 55.30 cal/g

Carbon tetrachloride (CCl_4) + Isopropyl alcohol
($\text{C}_3\text{H}_8\text{O}$)

Lecat, 1949

%	b. t.		Dt mix
0	76.75		
18	68.95	Az	-2.5
100	82.4		

Kolossofski and Theodorowitsch, 1935

%	b. t.		Q vap (cal/g)
0	76.75		-
-	68.75	Az	65.62
100	82.35		-

Hoffmann, 1943

N	molar extinction	N	molar extinction
21.2° - 21.8°			
7.788	0.00256	0.1988	0.04083
5.803	0.00351	0.0946	0.05423
4.007	0.00506	0.0499	0.06174
1.973	0.00900	0.0252	0.06390
1.006	0.01487	0.0182	0.06471
0.5030	0.02367	0.0	0.0667

by $\text{mol}^{-1}\text{cm}^{-1}$ Carbon tetrachloride (CCl_4) + Butyl alcohol
($\text{C}_4\text{H}_{10}\text{O}$)

Lecat, 1949

%	b. t.		Dt mix
0	76.75		
2.5	76.55	Az	-1.7
34	-		
100	117.8		

Smyth and Engel, 1929

mol%	P_1	P_2
0	308.9	0
2.45	303.9	5.1
11.28	291.5	13.1
22.36	280.4	15.7
32.86	276.0	15.6
41.64	256.7	18.2
50.51	240.7	19.4
52.41	236.0	18.1
61.53	213.6	19.7
68.39	189.5	20.5
74.08	161.3	20.2
82.34	125.3	21.1
86.48	99.2	22.4
92.18	62.4	23.9
100	0	33.3

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5101	918
10	1.4447	975
15	1.3827	1046
20	1.3301	1135
40	1.1462	1560
50	1.0695	1794
60	1.0023	1979
80	0.8942	2325
100	0.8064	2587

Rehfeld, 1955

mol%	d	v m/sec.	$\pi \cdot 10^{12}$ cm ² /dyn.
18°			
1.2973	1.5896	942.00	70.894
2.4785	1.5813	941.46	71.350
4.4744	1.5646	942.50	71.953
9.0584	1.5310	947.10	72.818
18.260	1.4597	961.57	74.092
34.339	1.3379	997.95	75.053
68.680	1.0720	1110.9	75.595
100	0.81242	1264.7	76.955

v = sound velocity

Smyth, Engel and Wilson, 1929

mol%	n_D	mol%	n_D
20°			
0	1.46026	57.07	1.42690
5.55	1.45677	61.97	1.42390
11.96	1.45307	71.54	1.41830
16.86	1.45017	80.95	1.41212
22.55	1.44687	85.98	1.40886
32.40	1.44125	91.17	1.40540
42.43	1.43532	95.65	1.40280
47.42	1.43251	100	1.39942
52.14	1.42980		

Schupp, 1949 (fig.)

Total polarization at 20°

Carbon tetrachloride (CCl₄) (b.t.=76.75)
+ Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	5.5	75.8	-2.2 (7%)
Sec. Butyl alcohol	C ₄ H ₁₀ O	99.5	7	75.6	-2.2 (20%)
Tert. Butyl alcohol	C ₄ H ₁₀ O	82.45	17	71.1	-0.4 (24%)

Carbon tetrachloride (CCl₄) + Isobutyl alcohol
(C₄H₁₀O)

Kolossofski and Theodorovitsch, 1935

%	b.t.	Q vap (cal/g)
0	76.75	-
-	75.75 Az	48.85
100	107.85	-

Timofeev, 1905

%	U
20°	
0	(0.2067)
67.9	0.495
100	0.579

%	Q dil (mole CCl ₄)	
initial	final	
100	90.1	174
90.1	81.6	247
81.6	73.6	270
73.6	69.0	289

Carbon tetrachloride (CCl₄) + tert. Butyl alcohol
(C₄H₁₀O)

Hoffmann, 1943

N	molar extinction	N	molar extinction
21.5°			
8.555	0.00410	0.1081	0.05572
7.665	.00455	0.1622	.05983
3.870	.00840	0.0806	.07153
1.890	.01448	0.0764	.07190
0.9330	.02339	0.0530	.07520
0.4981	.03469	0.0186	.07958
0.3066	.04032	0.0	.0822
0.2002	.05281		
30.0°			
7.577	0.00561	0.4933	0.04016
3.829	.01027	0.1982	.06089
1.870	.01749	0.1041	.07168
0.9240	.02785		
40.0°			
5.025	0.01028	0.6710	0.03955
3.7657	.01288	0.2918	.05723
1.896	.02084	0.0888	.07905
0.9114	.03309		

Carbon tetrachloride (CCl_4) + Isoamyl alcohol
($\text{C}_5\text{H}_{12}\text{O}$)

Krchma and Williams, 1927

mol%	d	n_D	ϵ
25°			
0	1.5835	1.45724	2.230
10	1.4965	1.45106	2.502
25	1.3700	1.44273	3.127
40	1.2453	1.43468	4.61
100	0.8083	1.40568	14.55

Carbon tetrachloride (CCl_4) + Dimethyl ethyl
carbinol ($\text{C}_5\text{H}_{12}\text{O}$)

Lecat, 1949

%	b. t.	Dt mix
0	76.75	
4.5	76.57	Az
3.8	-	-2.2
100	102.35	

Carbon tetrachloride (CCl_4) + tert. Amyl alcohol
($\text{C}_5\text{H}_{12}\text{O}$)

Hoffmann, 1943

molarity	molar extinction	molarity	molar extinction
5.911	0.00677	0.1014	0.06198
3.833	0.01002	0.0700	0.06405
2.094	0.01577	0.0387	0.06601
0.9838	0.02579	0.0216	0.06742
0.4932	0.03774	0.0	0.0684
0.1999	0.05395		

Carbon tetrachloride (CCl_4) + Hexyl alcohol
($\text{C}_6\text{H}_{14}\text{O}$)

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5119	961
10	1.4467	1058
15	1.3872	1167
20	1.3341	1299
40	1.1510	1931
50	1.0741	2317
60	1.0060	2737
80	0.9007	3570
100	0.8124	4329

Rehfeld, 1955

mol%	d	v m/sec.	$\pi \cdot 10^{12}$ cm ² /dyn.
18°			
1.4143	1.5851	940.96	71.254
2.6857	1.5723	941.85	71.699
5.2062	1.5463	944.02	72.567
8.9174	1.5120	949.54	73.357
20.009	1.4066	974.80	74.832
33.906	1.2845	1013.59	75.776
50.709	1.1493	1068.15	76.266
66.281	1.0345	1122.31	76.745
78.895	0.94840	1169.40	77.107
98.868	0.82145	1252.20	77.639
100	0.81298	1257.38	77.800

v = sound velocity

Carbon tetrachloride (CCl_4) + Heptyl alcohol
($\text{C}_7\text{H}_{16}\text{O}$)

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5123	982
10	1.4474	1102
15	1.3877	1237
20	1.3350	1402
40	1.1536	2175
50	1.0780	2716
60	1.0151	3302
80	0.9059	4527
100	0.8188	5710

Carbon tetrachloride (CCl_4) + Capryl alcohol
($\text{C}_8\text{H}_{18}\text{O}$)

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5129	1000
10	1.4480	1139
15	1.3884	1297
20	1.3360	1470
40	1.1550	2483
50	1.0821	3124
60	1.0168	3847
80	0.9089	5580
100	0.8221	7330

Carbon tetrachloride (CCl_4) + Decanol ($\text{C}_{10}\text{H}_{22}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
-25.2	5.7 E
-20.0	8.8
0.0	70.6
+6.88	100

Jones, Bowden, Yarnold and Jones, 1948

%	d	η
25°		
0	1.5844	902
5	1.5141	1031
10	1.4499	1224
15	1.3903	1441
20	1.3382	1775
40	1.1586	3091
50	1.0835	4012
60	1.0218	5080
80	0.9135	7860
100	0.8263	11850

Carbon tetrachloride (CCl_4) + 1-Dodecanol
($\text{C}_{12}\text{H}_{26}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
-23.3	1.1 E
-20.0	1.3
0.0	15.9
+10.0	45.3
20.0	81.8
23.95	100

Carbon tetrachloride (CCl_4) + 1-Tetradecanol
($\text{C}_{14}\text{H}_{30}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
-23.0	0.1 E
-20.0	0.2
0.0	1.9
+10.0	9.5
20.0	35.0
30.0	67.7
38.26	100

Carbon tetrachloride (CCl_4) + 1-Hexadecanol
($\text{C}_{16}\text{H}_{34}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f.t.	%
0.0	0.4
10.0	1.5
20.0	7.9
30.0	32.2
40.0	64.9
49.62	100

Rehfeld, 1955

mol%	d	v m/sec.	$\pi \cdot 10^{12}$ cm ² /dyne
18°			
1.0973	1.5752	949.00	70.498
2.0230	1.5547	953.56	70.734
3.8011	1.5189	964.56	70.765
7.7110	1.4470	992.25	70.192
14.549	1.3418	-	-

v = sound velocity

Carbon tetrachloride (CCl_4) + Heptadecanol
($\text{C}_{17}\text{H}_{36}\text{O}$)

Ralston, Hoerr and Crews, 1944

f. t.	%	
-25.6	3.3	E
-20.0	4.5	
-10.0	11.1	
0.0	32.0	
+10.0	63.5	
15.0	79.2	
21.72	100	

Carbon tetrachloride (CCl_4) + 1-Octadecanol
($\text{C}_{18}\text{H}_{38}\text{O}$)

Hoerr, Harwood and Ralston, 1944

f. t.	%	
0.0 below	0.1	
10.0	0.3	
20.0	1.7	
30.0	10.7	
40.0	37.5	
57.98	100	

Carbon tetrachloride (CCl_4) + Allyl alcohol
($\text{C}_3\text{H}_6\text{O}$)

Lecat, 1949

%	b. t.	Dt mix	
0	76.75		
11.5	72.32	Az	
12	-		-2.4
100	96.85		

Carbon tetrachloride (CCl_4) + Methyl malate 1
($\text{C}_6\text{H}_{10}\text{O}_5$)

Grossmann and Landau, 1910

g/100cc		(α)				
		red	yellow	green	pale blue	dark blue violet
20°						
50.321	+0.10	+0.20	+0.50	+0.60	+1.05	+1.25
25.1605	+0.76	+0.87	+1.27	+2.11	+2.66	-
12.5803	+1.51	+1.75	+2.46	+4.13	+5.33	-
4.985	+2.61	+4.21	+7.42	+8.63	+10.03	+10.83
2.4925	+4.41	+6.82	+10.43	+12.04	+14.04	-

Carbon tetrachloride (CCl_4) + Ethyl tartrate
($\text{C}_8\text{H}_{14}\text{O}_6$)

Patterson and Thomson, 1908

t	d	t	d
0%		8.82387%	
19.35	1.59555	18.91	1.55059
21.8	1.59114	23.07	1.54292
30.4	1.5742	29.60	1.53091
58.2	1.5196		
21.224%		48.926%	
18.1	1.49349	20.08	1.37606
23.44	1.48459	23.38	1.37155
27.56	1.47761	25.64	1.36817
29.54	1.47421	32.76	1.35838

t	(α) _D	t	(α) _D
8.82387%		21.224%	
18.6	1.21	16.7	0.92
19.5	1.48	26.8	2.37
20.9	1.68	31.5	3.02
25.2	2.49	35.8	3.73
27.9	2.83		
30.2	3.22		
48.926%			
16.9	2.36	30.9	4.35
22.5	3.00	35.3	4.78
26.5	3.77	39.4	5.45

%		d		(α) _D	
20°					
0	1.59472			+1.9	
8.8239	1.54858			+1.53	
21.224	1.49033			+1.38	
48.926	1.3762			+2.75	
Lowry and Dickson, 1915					
λ		(α)			
6708 Å	5893 Å	5780 Å	5461 Å	4358 Å	
20°					
100	+6.69	+7.45	+7.52	+7.50	+1.62
20	+0.20	-1.34	-1.73	-3.11	-17.17
Carbon tetrachloride (CCl ₄) + Cyclohexanol (C ₆ H ₁₂ O)					
Hoffmann, 1943					
N		molar extinction			
21.5°					
6.00	0.00326				
3.888	0.00549				
1.938	0.01045				
0.9639	0.01741				
0.4785	0.02748				
0.1910	0.04722				
0.0987	0.06433				
0.0326	0.07078				
0.0161	0.07271				
0.0	0.0758				
Golzman and Raskin, 1953 (fig.)					
mol%		t. of max. dielectric losses			
8	40				
20	56				
35	68				

Carbon tetrachloride (CCl ₄) + Borneol (C ₁₀ H ₁₈ O)			
Golzman and Raskin, 1953 (fig.)			
%		t max of dielectric losses	
6	20		
20	30		
30	36		
40	43		
46	48		
Carbon tetrachloride (CCl ₄) + Benzyl alcohol (C ₇ H ₈ O)			
Desmyter, 1948			
mol%		p	
0°			
100	0.0	41.1	85.5
98.1	6.6	39.5	88.4
97.4	11.6	30.6	89.1
89.5	29.8	19.6	94.1
81.6	49.7	9.6	98.5
70.6	62.1	4.8	100.1
61.4	72.9	0	108.5
48.9	84.4	0	107.0
47.7	84.3	0	106.9
Hoffmann, 1943			
N		molar extinction	
21.5°			
3.888	0.00446		
1.943	0.00783		
1.006	0.01277		
0.5137	0.02097		
0.1986	0.03661		
0.1024	0.04824		
0.0715	0.05370		
0.0498	0.05675		
0.0275	0.06110		
0.0	0.0643		

Ethyl bromide (C_2H_5Br) + Methyl alcohol (CH_3O)				Hirata, 1908			
Ryland, 1899				vol% η (alcohol = 1)			
				25°			
				75	0.7488		
				87.5	0.8687		
				93.75	0.9324		
				96.875	0.9682		
				98.4375	0.9857		
				99.21875	0.9940		
Lecat, 1949				Smyth, Engel and Wilson, 1929			
				mol% n_D	mol%	n_D	
				20°			
				0	1.42403	53.37	1.39312
				7.29	1.41992	59.49	1.38935
				12.20	1.41717	65.38	1.38559
				16.46	1.41477	72.18	1.38118
				24.27	1.41027	77.67	1.37745
				27.49	1.40830	81.66	1.37475
				37.65	1.40256	89.30	1.36934
				41.00	1.40058	93.82	1.36603
				47.80	1.39646	100	1.36152
Ethyl bromide (C_2H_5Br) + Ethyl alcohol (C_2H_5O)				Ethyl bromide (C_2H_5Br) + sec. Butyl alcohol Roland, 1928 (C_4H_9O)			
Ryland, 1899				mol% p_1			
				0.32°			
				0	165.5		
				15.46	155.9		
				29.86	146.8		
				49.48	104.4		
				71.15	48.0		
				16.84°			
				0	340.6		
				17.69	312.2		
				33.29	290.1		
				57.66	243.3		
				76.29	183.0		
				92.06	82.5		
Lecat, 1949				Veltmans, 1926			
				% d (α) $_D$			
				20°			
				0	1.4606	0	
				19.9	1.2470	2.98	
				40	1.0900	5.68	
				60	0.9780	8.24	
				73.1	0.9125	10.00	
				100	0.8069	13.87	
Smyth and Engel, 1929							
				mol% p_1	p_2		
				30°			
				0	567.8	0	
				11.75	527.1	40.7	
				28.10	503.0	49.2	sic
				29.97	562.2	47.1	
				41.66	474.2	51.6	
				54.31	447.9	53.5	
				62.10	415.8	59.1	
				67.84	389.6	60.9	
				75.47	338.2	64.0	
				75.62	339.8	63.8	
				80.86	292.6	65.8	
				85.53	240.2	68.4	
				86.63	223.8	67.6	
				89.56	183.8	69.5	
				100	0	78.4	

Ethyl bromide (C_2H_5Br) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)		pale		dark	
red	yellow	green	blue	blue	blue	violet	
20°							
50.158	-2.61	-3.07	-3.19	-3.07	-2.89	-2.61	
25.079	-1.52	-1.28	-0.92	-0.52	-0.20	-	
12.5395	-0.48	0.00	+0.32	+0.64	+0.88	-	
4.937	-0.20	+0.61	+1.62	+2.43	+3.24	+3.85	
2.4685	0.0	+0.81	+2.03	+2.84	+3.65	-	

Ethyl bromide (C_2H_5Br) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Thomson, 1908

t		d		t		d	
0%				2.01598%			
18.32	1.46369	18.47	1.4564				
19.62	1.46107	19.07	1.4552				
22.5	1.45523	21.6	1.4501				
4.9815%				10.92%			
18.7	1.44652	18.95	1.42832				
19.77	1.44439	22.9	1.42090				
20.93	1.44210	27.20	1.41242				
30.576%				65.282%			
18.85	1.3725	19.57	1.28320				
19.37	1.37129	20.17	1.28250				
20.10	1.37038	21.20	1.28117				

$\%$	d	$(\alpha)_D$
20°		
0	1.45983	-0.95
2.01598	1.45333	-
4.9815	1.44395	-0.98
0	1.46018	-
10.92	1.42631	-1.05
30.576	1.37055	-0.52
65.282	1.28272	+2.73

t	(α) _D	t	(α) _D
4.9815%		10.92%	
20.1	-0.97	17.1	-1.43
		21.5	-0.91
		26.8	-0.11
30.576%		65.282%	
19.1	-0.66	16.6	2.24
21.5	-0.22	23.5	3.27
		24.7	3.43

Ethyl iodide (C_2H_5I) + Methyl alcohol (CH_3O)

Ryland, 1899

%		b. t.	
0	72.3 - 72.5		
17 (770mm)	54.5 - 55.5	Az	
100	64.5 - 65		

Lecat, 1949

%		b. t.		Dt mix	
0	72.3				
18	54.4	Az			
30	-				-4.5
100	64.65				

Tsakalotos, 1910

%		d	η
20°			
0		1.934	646.1
26.8		1.348	632.0
68.7		0.9656	606.8
100		0.7932	597.2

Yajnik, Bhalla and al., 1925

%		η			
20°		35°		45°	
100	450	410	328		
90	451	412	343		
80	456	414	354		
70	465	420	364		
60	471	429	370		
50	473	448	376		
40	479	448	386		
30	480	447	390		
20	481	438	394		
10	483	436	398		
0	487	435	404		

Yajnik, Sharma and Bharadway, 1926

vol%		σ			
25.2°		37.5°		45°	
100	19.65	18.97	18.46		
90	20.75	20.04	19.49		
80	23.66	22.90	21.81		
70	25.12	23.81	22.95		
60	26.04	24.62	23.60		
50	26.80	24.83	24.23		
40	27.03	26.02	24.81		
30	28.21	26.78	25.34		
20	28.98	27.46	25.82		
10	29.61	28.18	26.37		
0	30.39	28.60	26.81		

Ethyl iodide (C_2H_5I) + Ethyl alcohol (C_2H_5O).

Smyth and Engel, 1929

mol%	p_1	p_2
30°		
0	162.3	0
4.38	162.4	25.9
13.07	152.9	44.9
28.86	148.2	53.1
36.68	145.3	55.3
40.00	144.4	56.2
48.75	139.8	57.1
55.07	137.3	59.6
62.59	132.1	61.8
68.54	125.8	63.3
73.84	116.7	64.9
78.36	106.5	66.2
81.95	97.4	68.4
84.83	88.2	69.4
89.12	72.1	70.0
95.19	32.1	70.7
100	0	78.2

Jana and Gupta, 1914

%	b. t.	%	b. t.
760 mm			
100	77.8	21.64	61.9
73.31	70.2	15.13	61.4
64.31	68.8	11.65	61.3
58.62	67.0	9.5	61.5
47.14	64.8	5.50	62.0
42.72	64.0	2.37	64.0
37.30	63.3	0	72
30.58	62.2		

Ryland, 1899

%	b. t.
0	71.5 - 72.5
14	62.5 - 63.5 Az
100	77.5 - 78

Lecat, 1949

%	b. t.	Dt mix
0	72.3	
13.2	62.5 Az	
30	-	
100	78.3	-4.9

Hirata, 1908

vol%	η (alcohol = 1)
25°	
75	0.8078
87.5	0.9029
93.75	0.9514
96.875	0.9815
98.4375	0.9912
99.21875	0.9950

Smyth, Engel and Wilson, 1929

mol%	n_D	mol%	n_D
20°			
0	1.51330	57.44	1.43408
13.93	1.49552	62.48	1.42614
25.94	1.47967	66.36	1.41992
36.81	1.46472	75.17	1.40528
47.59	1.44906	84.39	1.38950
51.56	1.44314	93.45	1.37329
52.68	1.44153	100	1.36152

Ethyl iodide (C_2H_5I) + Propyl alcohol (C_3H_8O)

Ryland, 1899

%	b. t.
0	72.3 - 72.5
7 (768mm)	69.5 - 70 Az
100	95.7

Lecat, 1949

%	b. t.	Dt mix
0	72.3	
7.5	70.1 Az	
30	-	
100	97.2	-5.5

Ethyl iodide (C_2H_5I) + Isopropyl alcohol (C_3H_8O)

Ryland, 1899

%	b. t.	
0	71.5 - 72.5	
13	65.5 - 66.5	Az
100	81 - 82	

Lecat, 1949

%	b. t.	Dt mix
0	72.3	
14	66.1	Az
50	-	
100	82.4	-4.2

Ethyl iodide (C_2H_5I) + Butyl alcohol ($C_4H_{10}O$)

Prentiss, 1929

mol%	p
20°	
79.5	111.5
79.5	105.5
79.5	106.5
66.0	104.5
59.0	105.0
59.0	104.5
48.0	101.0
48.0	99.0
42.5	95.0
38.0	92.0
17.6	69.0

Ethyl iodide (C_2H_5I) + tert. Butyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b. t.	Dt mix
0	72.3	
12	68.5	Az
100	82.45	-4.7

Ethyl iodide (C_2H_5I) + Allyl alcohol (C_3H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	72.3	
12	69.4	Az
50	-	
100	96.85	-4.3

Ethyl iodide (C_2H_5I) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet

20°

49.958	-2.16	-2.32	-2.40	-2.38	-2.10	-1.80
24.979	-1.04	-0.80	-0.36	+0.12	+0.40	-
12.4895	0.0	+0.72	+1.28	+2.08	+2.56	-
4.871	+0.62	+1.85	+3.28	+4.31	+4.93	+5.75
2.4355	+2.05	+3.28	+4.52	+5.34	+6.16	-

Ethyl iodide (C_2H_5I) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Thomson, 1908

t	d	t	d
0%		5.17118%	
19.25	1.93875	18.58	1.87591
20.99	1.93483	19.33	1.87422
24.54	1.92654	24.17	1.86367
32.35	1.90862	32.9	1.84426
10.6333%		32.766%	
18.22	1.81533	18.07	1.60740
20.41	1.81067	20.46	1.60373
21.75	1.80801	25.33	1.59553
26.01	1.79910		

% d (α)_D

20°

0	1.93706	-2.2
5.17118	1.87279	-1.88
10.6333	1.81155	-1.46
32.766	1.6044	+0.24

t		(α) _D	
5.17118 %			
20.6		-1.82	
25.2		-1.19	
27.0		-0.65	
50.2		+2.91	
10.6333 %			
12.8		-2.51	
19.7		-1.42	
25.4		-0.66	
30.6		+0.10	
45.9		+10.63	
32.766 %			
18.7		0.06	
26.2		1.13	
29.2		1.57	
30.6		1.87	

Ethylidene chloride (C ₂ H ₄ Cl ₂) (b. t. = 57.25)					
+ Alcohols					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH ₄ O	64.65	12	49.65	-2.4 (12%)
Ethyl alcohol	C ₂ H ₆ O	78.3	11.5	54.6	-4.5 (11.5%)
Isopropyl alcohol	C ₃ H ₈ O	82.4	10	56.5	-6.5 (10%)

Ethylidene chloride (C ₂ H ₄ Cl ₂) + Methyl malate 1 (C ₆ H ₁₀ O ₅)						
Grossmann and Landau, 1910						
g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
50.443	-1.25	-1.35	-1.07	-0.52	-0.22	+0.34
25.2215	+0.36	+0.99	+1.43	+2.54	+3.09	-
12.6108	+1.11	+1.98	+3.65	+4.84	+5.95	-
5.056	+1.38	+2.57	+4.55	+5.93	+7.32	+8.31
2.528	+1.58	+3.16	+5.14	+6.33	+7.52	-

Patterson and Thomson, 1908			
t	d	t	d
0%		4.64846%	
17.6	1.17922	19.91	1.17658
21.25	1.17354	23.17	1.17157
29.25	1.16097	27.87	1.16445
10.6933%		34.237%	
19.27	1.17915	19.9	1.1855
22.24	1.17471	25.28	1.17822
28.97	1.16467	27.71	1.17504

%	d	(α) _D
20°		
0	1.17549	-1.70
4.64846	1.17644	-2.15
10.6983	1.17806	-2.63
34.237	1.1854	-2.68

t	(α) _D	t	(α) _D
4.64846%		10.6983%	
11.5	-3.9	11.3	-4.44
16.1	-3.06	14.0	-3.93
19.6	-2.23	19.6	-2.7
22.8	-1.48	21.6	-2.25
25.3	-1.05		
27.8	+0.66		
34.237%			
12.0	-4.29	24.9	-1.65
17.0	-3.40	27.0	-1.22

ETHYLENE CHLORIDE + METHYL ALCOHOL

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Ethylene chloride ($C_2H_4Cl_2$) + Methyl alcohol
(CH_4O)

Udovenko and Frid, 1948

mol%	p			P ₁		P ₂
	40°	50°	60°	50°		
0	150.0	233.5	350.0	233.5		422.0
10	265.4	404.2	586.2	193.2		211.0
20	303.5	457.6	667.3	257.4		200.2
30	319.9	483.8	695.5	286.0		197.8
40	325.0	493.2	712.4	297.1		196.1
50	326.8	499.9	719.7	306.0		193.9
60	327.9	503.3	726.4	316.5		186.8
70	327.4	501.4	724.3	329.4		172.0
80	320.4	492.8	710.1	350.4		142.4
90	301.7	469.7	680.0	382.1		87.5
100	265.0	422.0	620.0	-		-

mol%	mol% V		
L	40°	50°	60°
10	47.9	47.8	46.4
20	56.9	56.2	55.6
30	59.2	59.1	58.4
40	60.3	60.2	59.9
50	60.5	61.2	61.3
60	61.4	62.5	63.2
70	64.0	65.7	66.4
80	69.7	71.1	71.9
90	81.0	81.4	82.2

Fordyce and Simonsen, 1949

L	%	V	b.t.
0.0		0.1	82.1
0.6		10.0	73.4
2.2		22.4	65.2
7.1		30.3	61.4
14.3		34.7	60.6
30.2		38.1	60.2
45.3		42.2	60.1
59.5		48.9	60.4
73.5		58.6	61.2
87.5		74.8	62.3
100.0		99.1	63.7

Lecat, 1949

%	b.t.	Dt mix
0	83.45	
32	60.9 Az	-2.4
100	64.65	

Herz and Levi, 1929

Az : 32% 60.95°

t	d		Az
	0%		
20	1.2548		1.0286
30	1.2396		1.0167
40	1.2249		1.0047
50	1.2102		0.9923

Udovenko, Ayrapetova and Filatova, 1951

mol%	d			
	30°	40°	50°	60°
100.00	0.7861	0.7759	0.7681	0.7588
91.20	0.8594	0.8478	0.8388	0.8277
83.93	0.9107	0.8997	0.8887	0.8769
79.82	0.9375	0.9265	0.9147	0.9035
69.06	0.9978	0.9860	0.9738	0.9632
62.21	1.0354	1.0204	1.0082	0.9961
53.74	1.0718	1.0584	1.0450	1.0354
42.17	1.1175	1.1030	1.0913	1.0774
23.69	1.1788	1.1646	1.1522	1.1383
15.68	1.2023	1.1868	1.1740	1.1594
0.0	1.2405	1.2264	1.2124	1.1974

Herz and Levi, 1929

t	η		Az
	0%		
20	832.0		684.9
30	723.4		589.8
40	645.4		514.0
50	580.3		458.5

Udovenko, Ayrapetova and Filatova, 1951

mol%	η			
	30°	40°	50°	60°
100.00	522.9	453.9	402.3	352.0
91.20	548.8	476.2	419.9	368.2
83.93	561.7	485.2	425.5	375.4
79.82	569.6	491.5	432.3	376.6
69.06	582.4	500.5	442.2	387.0
62.21	593.6	509.4	450.6	395.3
53.74	603.2	522.7	458.7	401.8
42.17	612.5	531.8	470.9	417.7
23.69	640.7	559.6	499.0	444.2
15.68	658.5	577.2	516.9	463.0
0.00	725.6	638.3	572.4	511.6

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ETHYLENE CHLORIDE + ETHYL ALCOHOL

Herz and Levi, 1929

t	0%	Az
20	31.92	27.17
30	30.61	26.12
40	28.88	24.93
50	27.42	23.26

Ethylene chloride ($C_2H_4Cl_2$) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b.t.	Dt mix
0	83.45	
35	70.5	Az
40	-	-3.9
100	78.3	

Udovenko and Fatkulina, 1952

mol%	p	P ₁	P ₂
L	V		
100	100	134.4	0.0
94.8	80.0	158.7	31.8
88.7	65.6	179.0	61.6
78	53.3	201.3	94.0
64.2	45.9	214.8	116.2
49.2	42.5	219.4	126.2
40.0	40.2	220.0	131.6
34.6	39.5	220.0	133.1
23.2	36.8	217.0	137.2
12.4	32.5	208.5	140.8
3.3	19.2	184.0	148.7
0	0	156.6	156.6
50°			
100	100	222.6	0.0
94.3	80.3	258.5	50.9
87.6	67.2	287.1	94.2
76.6	56.0	316.8	139.4
63.6	49.0	332.5	169.6
48.8	45.0	337.9	185.9
40.2	43.1	338.0	192.3
34.0	42	336.7	195.3
19.4	37.8	328.7	204.5
13.2	35.1	317.8	206.3
3.9	19.4	274.6	221.3
0	0	235.6	235.6
60°			
100	100	353.6	0.0
93.9	80.4	403.5	79.1
86.8	67.7	444.0	143.4
74.2	57.0	486.0	209.0
62.6	51.3	499.5	243.3
48.3	47.4	504.1	265.2
42.1	46.0	503.5	271.9
35.5	43.8	500.5	281.3
20.3	42.0	491.5	285.1
14.7	38.1	470.8	290.5
4.3	19.4	400.7	323.0
0	0	344.5	344.5

Udovenko and Frid, 1948

mol%	p	P ₁	P ₂
40°	50°	60°	50°
10	202.5	315.7	468.9
20	216.8	338.5	507.5
30	223.0	348.0	521.2
40	223.8	350.8	527.0
50	223.5	350.1	528.0
60	221.5	346.4	522.8
70	216.2	338.2	510.0
80	206.4	319.5	483.6
90	180.8	286.4	439.2
mol% V			
L	40°	50°	60°
10	31.7	32.0	31.9
20	38.4	39.3	40.3
30	40.9	42.1	43.2
40	41.6	43.3	45.2
50	42.3	44.6	47.0
60	44.3	46.6	48.8
70	47.7	50.1	52.5
80	54.2	56.7	59.1
90	67.0	67.0	72.5

Toropov and Nikonovich, 1955

mol%	p	mol%	p
L	V	L	V
40°			
0	0	156.0	0
5.0	24.5	194.0	4.3
7.6	29.0	200.0	7.2
13.5	32.8	209.8	10.3
29.1	38.1	219.4	22.8
50°			
0	0	344.0	12.2
3.5	18.3	393.8	28.5
5.5	21.7	410.2	
60°			
0	0	459.8	35.0
3.5	18.3	497.0	42.8

Herz and Levi, 1929

t	d	Az
20	0.7894	1.0372
30	0.7810	1.0247
40	0.7722	1.0121
50	0.7633	0.9993

Udovenko, Ayrapetova and Filatova, 1951

mol%	d			
	30°	40°	50°	60°
100.00	0.7829	0.7735	0.7655	0.7564
88.19	0.8522	0.8450	0.8342	0.8257
75.20	0.9229	0.9121	0.9006	0.8902
59.89	0.9996	0.9877	0.9752	0.9639
47.26	0.0568	1.0440	1.0318	1.0176
39.12	1.0917	1.0775	1.0647	1.0520
32.79	1.1118	1.1027	1.0992	1.0780
22.95	1.1565	1.1420	1.1285	1.1143
12.15	1.1965	1.1826	1.1685	1.1529
6.40	1.2175	1.2021	1.1890	1.1733
0.00	1.2405	1.2264	1.2124	1.1974

Herz and Levi, 1929

t	100%	Az
20	1231.2	846.0
30	1020.2	725.3
40	846.6	630.0
50	703.2	543.3

Udovenko, Ayrapetova and Filatova, 1951

mol%	η			
	30°	40°	50°	60°
100.00	948.2	816.5	692.1	583.9
88.19	874.6	737.4	628.0	533.5
75.20	790.7	667.1	572.3	491.7
59.89	725.1	617.8	536.0	465.1
47.26	687.3	589.5	516.1	450.0
39.12	670.2	580.6	510.7	447.8
32.79	666.8	576.7	511.5	449.3
22.95	665.4	578.7	512.0	455.2
12.15	677.9	593.8	533.6	475.3
6.40	695.4	612.6	552.9	495.4
0.00	725.6	638.3	572.4	511.6

Herz and Levi, 1929

t	100%	Az
20	22.53	27.11
30	21.24	26.10
40	20.71	24.83
50	19.80	23.60

Ethylene chloride ($C_2H_4Cl_2$) + Propyl alcohol
(C_3H_8O)

Udovenko and Frid, 1948

mol%	p			
	50°	60°	70°	80°
10	246.0	361.7	515.5	717.2
20	245.0	36.25	518.5	722.0
30	243.2	359.7	515.3	719.0
40	238.0	354.1	507.6	712.0
50	230.9	344.0	493.5	695.0
60	218.0	326.1	470.0	667.0
70	198.3	298.0	435.4	628.0
80	170.7	269.2	386.5	562.8
90	132.8	210.0	320.4	480.0

mol%	L	P ₁ P ₂	
		60°	
10		42.3	319.4
20		60.2	302.3
30		68.5	291.2
40		76.8	277.3
50		83.2	260.8
60		91.1	235.0
70		100.6	197.4
80		117.1	143.1
90		131.6	78.4

mol%	L	mol% V			
		50°	60°	70°	80°
10		10.6	11.7	12.7	14.0
20		15.0	16.6	18.2	20.3
30		17.3	19.0	21.1	22.7
40		19.5	21.7	24.2	26.6
50		21.8	24.2	27.0	29.7
60		25.5	27.9	30.8	33.6
70		31.7	33.8	38.0	41.3
80		41.2	45.0	48.8	52.7
90		59.1	62.7	66.2	69.4

Lecat, 1949

%	b. t.	Dt mix
0	83.45	
18	80.5 Az	
40	-	-5.7
100	97.2	

Udovenko, Ayrapetova and Filatova, 1951

mol%	d			
	30°	40°	50°	60°
100.00	0.7964	0.7892	0.7818	0.7727
83.60	0.8724	0.8619	0.8533	0.8436
67.21	0.9462	0.9351	0.9243	0.9123
55.79	0.9965	0.9842	0.9734	0.9615
32.60	1.1147	1.1008	1.0879	1.0746
21.63	1.1455	1.1315	1.1168	1.1033
11.82	1.1887	1.1736	1.1604	1.1462
0.0	1.2405	1.2264	1.2124	1.1974

mol%	η			
	30°	40°	50°	60°
100.00	1768.0	1385.8	1128.0	915.4
83.60	1328.0	1071.1	1887.2	736.0
67.21	1034.0	851.4	1721.0	611.5
55.79	900.7	756.3	1648.4	555.5
32.60	726.3	629.3	1554.2	487.8
21.63	688.8	616.7	1548.8	483.3
11.82	696.9	608.9	1548.3	486.4
0.00	725.6	638.3	1572.4	511.6

Ethylene chloride ($C_2H_4Cl_2$) + Butyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b. t.	Dt mix
0	83.45	
20	-	-3.5
23	71.0	Az
100	82.4	

Udovenko, Ayrapetova and Filatova, 1951

mol%	d			
	30°	40°	50°	60°
100.00	0.8029	0.7958	0.7881	0.7803
85.60	0.8582	0.8495	0.8415	0.8340
67.68	0.9288	0.9184	0.9104	0.8925
56.18	0.9760	0.9650	0.9541	0.9438
46.83	1.0160	1.0052	0.9914	0.9815
31.78	1.0829	1.0706	1.0575	1.0459
20.52	1.1345	1.1201	1.1063	1.0942
9.69	1.1908	1.1752	1.1620	1.1482
0.00	1.2405	1.2264	1.2124	1.1974

mol%	η			
	30°	40°	50°	60°
100.00	2254.8	1758.9	1405.1	1126.7
85.60	1744.1	1378.5	1122.8	931.3
67.68	1271.6	1036.0	871.1	728.8
56.18	1061.7	873.4	744.7	635.7
46.83	941.8	789.2	679.1	583.8
31.78	808.1	692.0	606.1	531.0
20.52	744.9	642.7	571.0	504.0
9.69	712.1	620.5	558.4	497.8
0.00	725.6	638.3	572.4	511.6

Ethylene chloride ($C_2H_4Cl_2$) + Isobutyl alcohol
($C_4H_{10}O$)

Udovenko and Frid, 1948

mol%	p			
	50°	60°	70°	80°
0	233.5	350.0	493.0	678.2
10	234.0	351.0	494.3	683.7
20	231.0	346.0	490.4	677.0
30	225.0	337.5	478.0	664.0
40	216.0	326.5	462.5	646.0
50	205.5	310.5	440.0	620.4
60	192.5	289.5	413.2	585.0
70	173.1	261.2	378.6	542.0
80	144.0	218.4	320.8	464.3
90	104.0	163.4	248.6	370.1
100	56.0	96.0	157.0	249.8

mol%	p_1	p_2
	60°	
10	28.5	322.5
20	40.1	305.9
30	45.5	292.0
40	51.3	275.2
50	55.3	255.2
60	60.2	229.3
70	67.5	193.7
80	77.0	141.4
90	86.4	77.0

mol%	mol% V			
	50°	60°	70°	80°
10	7.2	8.1	8.9	10.0
20	10.4	11.6	13.1	14.8
30	12.2	13.5	15.5	17.3
40	13.9	15.7	18.0	19.8
50	16.0	17.8	20.2	22.5
60	18.8	20.8	23.3	25.8
70	23.4	25.8	29.1	32.2
80	31.6	35.3	39.2	43.0
90	48.6	52.8	56.8	60.8

Lecat, 1949

Ethylene chloride ($C_2H_4Cl_2$) (b. t. = 83.45) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Isobutyl alcohol	$C_4H_{10}O$	108.0	5	-	-4.1 (6.5%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	12	83.15	-5.8 (25%)
tert. Butyl alcohol	$C_4H_{10}O$	82.45	20	-	-5.5 (22%)

Ethylene chloride ($C_2H_4Cl_2$) + Isoamyl alcohol
($C_5H_{12}O$)

Udovenko and Frid, 1948

mol%	50°	60°	70°	80°
0	233.5	350.0	493.0	678.2
10	219.6	328.0	463.5	640.4
20	206.2	306.0	434.9	603.0
30	194.0	288.0	409.1	566.2
40	182.8	270.3	383.9	532.7
50	170.9	250.7	357.1	495.8
60	156.1	226.5	323.9	453.0
70	136.0	196.6	282.6	398.0
80	107.1	157.3	229.0	325.5
90	68.6	104.5	155.7	227.0
100	17.5	32.0	57.5	97.0

mol%	P ₁	P ₂
60°		
10	321.0	7.0
20	294.8	11.8
30	272.9	15.1
40	252.6	17.7
50	231.0	19.7
60	205.0	21.5
70	173.3	23.3
80	131.9	25.4
90	76.4	28.1

mol%	50°	60°	70°	80°
10	1.8	2.1	2.6	3.2
20	3.2	3.8	4.8	5.7
30	4.4	5.2	6.5	7.9
40	5.4	6.5	8.1	9.8
50	6.4	7.9	9.8	11.8
60	7.7	9.5	11.8	14.1
70	9.6	11.9	14.6	17.4
80	13.1	16.1	19.7	23.2
90	22.4	26.9	32.1	36.7

Udovenko, Ayrapetova and Filatova, 1951

mol%	30°	40°	50°	60°
100.00	0.8040	0.7960	0.7685	0.7838
88.80	0.8397	0.8309	0.8229	0.8144
80.49	0.8674	0.8585	0.8503	0.8426
66.39	0.9180	0.9089	0.8983	0.8916
57.65	0.9519	0.9419	0.9315	0.9203
43.02	1.0127	1.0028	0.9910	0.9789
32.64	1.0612	1.0483	1.0369	1.0242
22.01	1.1123	1.1005	1.0871	1.0764
12.72	1.1635	1.1515	1.1366	1.1256
0.00	1.2405	1.2264	1.2124	1.1974

mol%	30°	40°	50°	60°
100.00	3267.1	2429.2	1867.4	1451.6
88.80	2510.5	1909.8	1507.2	1197.6
80.49	2080.8	1619.1	1309.1	1059.0
66.39	1532.1	1229.8	1014.6	852.2
57.65	1301.6	1064.7	891.7	748.1
43.02	1028.6	857.9	736.5	633.3
32.64	905.4	764.9	665.0	586.6
22.01	797.0	686.5	603.0	531.7
12.72	743.0	647.8	578.6	514.2
0.00	725.6	638.3	572.4	511.6

Ethylene chloride ($C_2H_4Cl_2$) + Allyl alcohol
Lecat, 1949 (C_3H_6O)

%	b. t.
0	83.45
15	74.5 Az
100	96.85

Ethylene chloride ($C_2H_4Cl_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)
red yellow green pale dark violet	blue blue
20°	
49.917	-1.40 -0.90 +0.10 +0.40 +0.80 +1.20
24.9585	+0.96 +1.40 +2.68 +4.01 +4.89 -
12.4793	+1.52 +2.08 +4.25 +5.53 +7.21 -
5.123	+3.51 +4.68 +6.85 +8.98 +9.96 +11.52
2.5615	+4.29 +5.47 +7.03 +9.37 +10.15 -

Ethylene chloride ($C_2H_4Cl_2$) + Methyl tartrate
Lowry and Abram, 1915 ($C_6H_{10}O_6$)

λ	(α)
	25g/100cc 100%
6708	-8.16 +2.79
6438	9.31 2.65
5780	13.50 2.05
5700	14.56 -
5461	16.51 +1.28
5218	19.56 -
5153	20.60 -
5105	21.28 -
5086	21.53 -0.39
4811	26.97 -
4800	27.09 2.47
4722	29.04 -
4678	30.12 -
4470	36.7 -
4385	40.92 8.93
4358	40.92 -
4299	43.3 -
4236	46.7 -

Ethylene chloride ($C_2H_4Cl_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Thomson, 1908

%	d	%	d
0%		5.8702%	
18.5	1.25569	18.66	1.25058
21.42	1.25141	20.27	1.24829
27.15	1.24303	24.05	1.24287
11.733%		22.0379%	
18.76	1.24630	18.15	1.24076
20.96	1.24322	20.92	1.23711
31.72	1.22819	30.65	1.22404
49.7182%			
18.15	1.22641	27.12	1.21553
21.65	1.22217		

%	d	(α) _D
20°		
0	1.25350	-4.20
5.8702	1.24868	-4.07
11.733	1.24457	-3.80
22.0379	1.23833	-3.40
49.7182	1.22417	-1.22

t	(α) _D	t	(α) _D
5.8702%		11.733%	
15.9	-4.65	13.9	-4.61
19.0	-4.19	18.4	-4.03
39.8	-1.76	36.9	-1.48
45.5	-1.12	41.5	-0.75
22.0379%		49.7182%	
13.6	-4.54	14.7	-2.12
16.8	-4.07	18.2	-1.48
20.6	-3.27	23.3	-0.79
24.2	-2.65	27.2	-0.03
26.0	-2.24	30.9	-0.64
29.6	-1.62		

Lowry and Dickson, 1915

%	(α)				
	6708 Å	5893 Å	5780 Å	5461 Å	4358 Å
20°					
100	+6.69	+7.45	+7.52	+7.50	+1.62
20	-1.36	-3.63	-4.11	-5.88	-22.39
10	-1.55	-3.76	-4.24	-6.09	-23.11
5	-1.71	-	-4.63	-6.40	-23.80

Ethylene chloride ($C_2H_4Cl_2$) + Ethylene chlorhydrin
(C_2H_5OCl)

Kaplan, Grishin and Skvortsova, 1937

%	d
20°	
100	1.2022
90	1.2073
80	1.2124
70	1.2176
60	1.2224
50	1.2276
40	1.2326
30	1.2374
20	1.2424
10	1.2476
0	1.2527

L	V	b. t.
100	100	125.44
96.8	62	117.8
92.5	55.5	111.2
87.5	34	104.9
86	33.5	100.3
77	22.5	98.5
72	23	95.5
61	11.5	91.64
50.5	10.5	89.83
39	7	87.86
0	0	83.28

Ethylene bromide ($C_2H_4Br_2$) + Propyl alcohol
(C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	131.65	
50	-	-4.9
91	97.0 Az	
100	97.2	

Herz, 1930

%	d	n _D
19.7°		
99.9916	0.86081	1.391592
79.1484	0.92908	1.399136
59.2650	1.04453	1.415815
39.9060	1.29695	1.439015
19.9157	1.62640	1.475796
9.9088	1.86652	1.503227

Schütt, 1892

%	d
18.07°	
100.0000	0.80659
89.9916	0.86081
79.1484	0.92908
70.1649	0.99300
59.2680	1.08453
50.1516	1.17623
39.9060	1.29695
29.9877	1.44175
19.9157	1.62640
9.9088	1.86652
0.0000	2.18300

%	n		
	Li	Ha	D
18.07°			
100.0000	1.383919	1.384249	1.386161
89.9916	1.389551	1.389897	1.391892
79.1484	1.396690	1.397065	1.399136
70.1649	1.403405	1.403776	1.405958
59.2680	1.413118	1.413486	1.415815
50.1516	1.422890	1.423322	1.425748
39.9060	1.435944	1.436372	1.439013
29.9877	1.451726	1.452232	1.455063
19.9157	1.472145	1.472691	1.475796
9.9088	1.499120	1.499709	1.503227
0.0000	1.535674	1.536370	1.540399
	TI	H _β	H _γ
100.0000	1.388257	1.390775	1.394593
89.9916	1.394071	1.396690	1.400633
79.1484	1.401427	1.404199	1.408338
70.1649	1.408336	1.411238	1.415559
59.2680	1.418350	1.421414	1.426050
50.1516	1.428441	1.431731	1.436656
39.9060	1.441922	1.445434	1.450766
29.9877	1.458210	1.462076	1.467899
19.9157	1.479301	1.483591	1.490018
9.9088	1.507141	1.511956	1.519293
0.0000	1.544917	1.550501	1.558986

Lecat, 1949

Ethylene bromide ($C_2H_4Br_2$) (b. t. = 131.65) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	44%	114.75	-6.0 (32%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	63	106.75	-4.2 (63%)
Amyl alcohol	$C_5H_{12}O$	138.2	22	127.3	-6.5 (20%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	30.5	124.15	-8.0 (30%)
Methyl propyl carbinol	$C_5H_{12}O$	119.8	53	119.0	-8.5 (35%)

Ethylene bromide ($C_2H_4Br_2$) + Isobutyl alcohol
($C_4H_{10}O$)

Ryland, 1899

%	b. t.
0	129 - 130
62	104.5 Az
100	105.3 - 106.3

Ethylene bromide ($C_2H_4Br_2$) + Amyl alcohol
($C_5H_{12}O$)

Ryland, 1899

%	b. t.
0	129 - 130
30	121 - 122 Az
100	128 - 129

Ethylene bromide ($C_2H_4Br_2$) (b.t. = 131.65) +
Alcohols

Name	2nd Comp. Formula	b.t.	Az		Sat. t. Dt mix
			%	b.t.	
Allyl alcohol	C_3H_6O	96.85	-	96.7	-
Glycol	$C_2H_5O_2$	197.4	3.5	130.89	102 (3.5%)
Methoxy- glycol	$C_3H_8O_2$	124.5	36.5	120.55	-1.5 (45%)
Ethoxy- glycol	$C_4H_{10}O_2$	135.3	23	127.75	-0.6 (85%)
Methyl lactate	$C_4H_8O_3$	143.8	18	130.0	+0.8 (10%)

Ethylene bromide ($C_2H_4Br_2$) + Methyl malate
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
49.896	+0.56	+1.24	+1.70	+2.75	+3.67	+4.73
24.948	+2.57	+3.53	+5.01	+6.73	+8.46	-
12.474	+3.77	+5.53	+6.89	+9.70	+11.78	-
4.925	+5.08	+7.92	+10.36	+14.01	+15.84	+18.27
2.4625	+6.50	+8.93	+11.78	+15.43	+17.87	-

Ethylene bromide ($C_2H_4Br_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Winther, 1907

%	d	(α) _D
	20°	
100	1.20435	-
69.600	1.38674	+2.62
44.472	1.58990	-1.94
22.494	1.82975	-6.99
11.583	1.98142	-10.79
5.532	2.07885	-14.16
2.311	2.13618	-16.72
1.197	2.15666	-17.3
0.4235	2.17133	-18.7
0	2.17888	-

(α)
red yellow green pale dark
blue blue

20°					
69.600	+3.10	+2.62	+1.34	-3.60	-6.82
44.472	-0.38	-1.94	-4.34	-11.56	-15.98
22.494	-4.35	-6.99	-10.75	-20.47	-26.24
11.583	-7.29	-10.79	-15.36	-27.47	-34.14
5.532	-9.65	-14.16	-19.80	-33.33	-41.07
2.311	-11.77	-16.72	-23.19	-38.40	-46.43

Scheuer, 1910

%	(α)			
	6527.6 Å	5890.25 Å	5783.6 Å	5455.9 Å
8.43	-1.096	-2.185	-2.522	-3.668
21.62	+0.051	-0.819	-1.070	-2.008
53.79	+2.312	+2.030	+1.927	+1.372
76.58	+3.582	+3.639	+3.477	+3.139
92.34	+4.465	+4.622	+4.592	+4.476
100	+4.833	+5.173	+5.181	+5.151
%				
	4739.7 Å	4364.8 Å	4346.2 Å	
8.43	-8.088	-14.224	-14.858	
21.62	-6.116	-11.895	-12.053	
53.79	-1.540	-	-6.499	
76.58	+1.273	-	-2.689	
92.34	+2.747	-	-0.458	
100	+3.390	-	+0.195	

Lowry and Dikson, 1915

%	(α)				
	6708 Å	5893 Å	5780 Å	5461 Å	4358 Å
20°					
5	-10.90	-16.06	-17.11	-20.73	-48.70
10	-9.60	-14.26	-15.23	-18.65	-44.76
20	-7.40	-11.52	-12.35	-15.23	-38.76
100	+6.69	+7.45	+7.52	+7.50	+1.62

λ	(α)	
	100%	25g/100cc
20°		
6708	+6.69	-6.66
6438	7.00	7.57
58.93	7.25	10.56
5780	7.52	11.33
5461	7.50	14.11
5086	6.96	18.75
4800	5.85	23.89
4359	1.62	36.77
4326	-	38.6
4308	-	39.0
4271	+0.21	40.7
4154	-	-46.6

Ethylene bromide ($C_2H_4Br_2$) + Propyl tartrate
($C_{10}H_{18}O_6$)

Winther, 1903

t	d		
	15.29%	45%	74.51%
20	1.8868	1.5293	1.2916
30	1.8704	1.5168	1.2803
40	1.8544	1.5036	1.2682
60	1.8363	1.4902	1.2581
70	1.8019	1.4631	1.2358

t	(α)				
	red	yellow	green	pale blue	dark blue
74.71%					
20	+7.85	+8.93	+9.19	+7.59	+6.12
30	8.70	9.99	10.59	9.57	8.41
40	9.46	10.95	11.83	11.39	10.49
50	10.13	11.83	12.97	13.04	12.35
60	10.72	12.62	13.99	14.53	13.99
70	11.21	13.32	14.89	15.84	15.40
45.5%					
20	+5.40	+5.70	+5.04	+1.54	-0.52
30	6.31	6.82	6.64	3.79	+1.96
40	7.15	7.89	8.10	5.83	4.26
50	7.92	8.90	9.40	7.76	6.38
60	8.62	9.86	10.56	9.47	8.31
70	9.25	10.76	11.56	10.98	10.05
15.29%					
20	+2.19	+1.50	-0.17	-6.35	-8.98
30	3.20	2.79	+1.61	3.62	6.24
40	4.16	4.02	3.25	1.16	3.63
50	5.10	5.18	4.72	+1.03	1.16
60	5.99	6.27	6.03	2.93	+1.18
70	6.85	7.28	7.17	4.55	3.38

Ethylene bromide ($C_2H_4Br_2$) (b. t. = 131.65) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Ethylene chlorhydrin	C_2H_5OCl	128.6	33.5	122.3	-5.2 (39%)
2-Chlor-1-propyl alcohol	C_3H_7OCl	133.7	33	128.0	-4.8 (30%)
1-Chlor-2-propyl alcohol	C_3H_7OCl	127.0	62	124.8	-4.5 (30%)
Ethylene bromhydrin	C_2H_5OBr	150.2	10	130.5	-1.0 (10%)

Ethylene bromide ($C_2H_4Br_2$) + Menthol ($C_{10}H_{20}O$)

Dahms, 1905

f. t.	%	f. t.	%
9.61	0	11.8	27.36
9.105	0.031	14.8	38.33
8.71	1.66	17.5	48.39
7.58	4.28	24.1	65.64
6.29	8.80	28.7	75.91
5.55	12.70		
5.40	13.7		
5.15 - 6.4	15.47		
8.8	20.18		

Ethylidene bromide ($C_2H_4Br_2$) (b. t. = 109.5) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	43	94.0	-0.8 (43%)
Isopropyl alcohol	C_3H_8O	82.4	-	82.0	-5.0 (50%)
Butyl alcohol	$C_4H_{10}O$	117.8	20	104.5	-6.8 (20%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	32	101.0	-7.2 (35%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	50	108.5	-5.5 (50%)
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	55	101.3	-

Ethylene chlorbromide (C_2H_4ClBr) + Ethyl alcohol
Lecat, 1949 (C_2H_6O)

%	b. t.
0	106.7
53	77.0 Az
100	78.3

Ethylene chlorbromide (C_2H_4ClBr) + Isobutyl
alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.	Dt mix
0	106.7	
30	100.2 Az	
50	-	
100	108.0	-5.3

1,1,2-Trichlorethane ($C_2H_3Cl_3$) + Isobutyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	113.65
38	103.8 Az
100	108.0

1,1,2-Trichlorethane ($C_2H_3Cl_3$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)				
		red	yellow	green	pale blue	dark violet blue
20°						
50.031	+0.72	+1.08	+1.82	+3.20	+3.78	+4.86
25.0155	+2.44	+3.64	+4.52	+6.40	+7.52	-
12.5078	+3.68	+5.28	+7.68	+9.03	+10.79	-
4.983	+4.42	+6.42	+9.43	+10.03	+12.24	+14.85
2.4915	+5.22	+6.82	+9.63	+10.84	+12.84	-

Acetylene tetrachloride ($C_2H_2Cl_4$) + Isobutanol
($C_4H_{10}O$)

Fritzsche and Stockton, 1946

%	d	%	d
25°			
100.0	0.796	39.60	1.129
89.85	0.834	36.45	1.149
79.74	0.879	29.60	1.217
69.60	0.930	24.85	1.266
59.50	0.991	14.94	1.379
49.55	1.060	4.95	1.510
		0	1.588
mol% at b. t.		mol% V	
L	V	L	V
4.0	20.9	36.5	69.0
7.2	27.0	50.4	78.5
7.0	39.4	71.0	85.5
14.5	48.0	86.0	92.5
23.0	61.1	96.4	98.8

Lecat, 1949

Acetylene tetrachloride ($C_2H_2Cl_4$) (b. t. = 146.2)
+ Varia

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Glycol	$C_2H_6O_2$	197.4	7.5	144.9	88.5 (7.5%)
Ethylene chlorhydrine	C_2H_5OCl	128.6	69	128.2	-0.1 (80%)
Dichlor-ethanol	$C_2H_4OCl_2$	146.2	48	144.0	-0.2 (20%)
Ethylene bromhydrine	C_2H_5OBr	150.2	-	141.5	-0.3 (30%)

Tetrachlorethane s. ($C_2H_2Cl_4$) + Methyl malate
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)				
		red	yellow	green	pale blue	dark violet blue
20°						
50.626	+1.68	+3.16	+4.64	+5.83	+7.11	+8.39
25.313	+4.23	+5.49	+7.47	+9.80	+11.69	-
12.6565	+5.06	+6.32	+9.24	+12.01	+13.75	-
4.802	+6.04	+8.12	+11.87	+15.41	+17.91	+20.20
2.401	+6.25	+8.75	+12.49	+16.24	+18.33	-

Tetrachlorethane s. ($C_2H_2Cl_4$) + Ethyl tartrate
($C_6H_{14}O_6$)

Patterson and Thomson, 1908

t	d	t	d
0%		4.96198%	
18.2	1.60303	18.79	1.57512
21.1	1.5985	22.23	1.56993
26.62	1.58995	27.44	1.56203
9.314%		38.062%	
21.68	1.54838	17.76	1.42309
31.92	1.53320	23.41	1.41578
32.50	1.5323	28.27	1.40950
41.0	1.5198		
71.2	1.4747		

%	d	(α) _D
20°		
0	1.60022	-16.60
4.96198	1.57330	-15.20
9.3140	1.5508	-13.80
38.0616	1.4202	-6.55

t	(α) _D	t	(α) _D
4.96198%		9.314%	
15.2	-16.53	16.0	-14.81
21.2	-14.93	22.3	-13.33
26.9	-13.24	29.1	-11.42
31.5	-11.76	33.4	-10.30
36.5	-10.44	39.3	-8.48
		48.2	-6.82
		66.4	-3.19
		72.3	-1.66
		92.8	+1.77
		101.3	+2.61
38.062%			
15.6	-7.55		
23.1	-5.90		
27.1	-4.94		
30.9	-4.27		
34.6	-3.65		
37.6	-2.84		

Lowry and Dickson, 1915

%	(α)				
	6708 Å	5893 Å	5780 Å	5461 Å	4358 Å
20°					
100	+6.69	+7.45	+7.52	+7.50	+1.62
20	-8.13	-12.41	-13.30	-16.33	-39.70
10	-9.54	-14.31	-15.25	-18.48	-43.57
5	-10.35	-15.17	-16.20	-19.55	-45.17

Tetrachlorethane s. ($C_2H_2Cl_4$) + Isobutyl tartrate
($C_{12}H_{22}O_6$)

Patterson, 1916

t	d	t	d
33.362%		48.15%	
0.0	1.4035	24.8	1.2927
16.2	1.3883	30.2	1.2867
16.4	1.3831	42.2	1.2729
43.96	1.3482	50.8	1.2630
44.0	1.3481	67.0	1.2442
68.0	1.3199	72.8	1.2377
99.4	1.2782	99.65	1.2061
99.7	1.2778		

t	(α)		
	6716.3 Å	6234.3 Å	5790.5 Å
33.362%			
0.0	5.459	5.816	5.974
16.4	7.471	8.229	8.886
44.0	10.183	11.389	12.583
68.0	11.90	13.343	14.908
99.4	13.26	14.915	16.844
	5460.7 Å	4959.7 Å	4358.3 Å
0.0	5.813	4.553	-0.261
16.4	9.146	8.84	+5.628
44.0	13.428	14.320	13.314
68.0	16.013	17.838	18.235
99.4	18.353	20.78	22.558

t	(α)		
	6716.3 Å	6234.3 Å	5790.5 Å
48.15%			
24.8	9.289	10.443	11.497
42.2	10.846	12.236	13.583
67.0	12.390	14.067	15.820
99.65	13.776	15.592	17.607
	5460.7 Å	4959.7 Å	4358.3 Å
24.8	12.20	12.743	11.040
42.2	14.566	15.832	15.300
67.0	17.211	19.249	20.075
99.65	19.283	22.057	24.263

t	d	t	d
100%			
75.2	1.0309 (d)	98.2	1.0107 (1)
86.2	.0206 "	108.6	1.0007 "
97.7	.0105 "	130.2	0.9809 "
		146.0	0.9649 "
t	d	(α)	
100%			
6716.3 Å			
73.0	1.0325	15.863	
99.05	1.0094	16.328	
132.0	0.9788	16.422	
171.7	0.9416	16.016	
193.0	0.9212	15.640	
226.3	0.8892	15.275	
6234.3 Å			
73.0	1.0325	17.936	
99.05	1.0094	18.510	
152.0	0.9788	18.729	
171.7	0.9416	18.305	
193.0	0.9212	17.930	
226.3	0.8892	17.302	
5790.5 Å			
73.0	1.0325	20.50	
99.05	1.0094	21.166	
132.0	0.9788	21.426	
171.7	0.9416	20.937	
193.0	0.9212	20.557	
226.3	0.8892	19.795	
5460.7 Å			
73.0	1.0325	22.769	
99.05	1.0094	23.337	
132.0	0.9788	23.139	
171.7	0.9416	23.139	
193.0	0.9212	22.71	
226.3	0.8892	21.97	
4959.7 Å			
73.0	1.0325	26.143	
99.05	1.0094	27.194	
132.0	0.9788	27.752	
171.7	0.9416	27.336	
193.0	0.9212	26.856	
226.3	0.8892	26.032	
4358.3 Å			
73.0	1.0325	29.687	
99.05	1.0094	31.397	
132.0	0.9788	32.330	
171.7	0.9416	32.104	
193.0	0.9212	31.73	
226.3	0.8892	30.957	

 Acetylene tetrabromide ($C_2H_2Br_4$) + Methyl-1-malate
 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet

20°

50.267	+2.45	+3.34	+4.64	+6.19	+7.78	+9.11
25.1335	+5.45	+7.08	+9.59	+12.17	+14.40	-
12.5668	+7.96	+10.19	+12.65	+16.07	+18.70	-
4.905	+8.56	+11.82	+14.68	+17.13	+19.98	+24.26
2.4525	+8.56	+11.82	+14.68	+17.13	+19.98	-

 Acetylene tetrabromide ($C_2H_2Br_4$) + Ethyl tartrate
 ($C_8H_{14}O_6$)

Patterson and Thomson, 1908

t	%	t	%
0%		5.6676%	
20.87	2.96182	19.99	2.72802
23.78	2.95518	22.81	2.72193
31.5	2.93793	31.50	2.7038
		45.91	2.6736
9.9596%		20.110%	
19.82	2.57597	17.76	2.28204
21.95	2.57167	20.75	2.27661
30.2	2.55516	25.98	2.26694

%	d	(α) _D
20°		
0	2.9638	-20.0
5.6676	2.72804	-13.47
9.95956	2.57561	-10.19
20.1106	2-27798	-5.53

t	(α) _D	t	(α) _D
5.6676%		9.9596%	
17.7	-13.93	16.2	-11.01
20.4	-13.35	19.6	-10.26
23.0	-12.85	22.8	-9.54
25.4	-12.24	31.7	-7.74
44.4	-8.34		
20.1106%			
11.7	-7.03	16.3	-6.28
12.6	-6.83	19.8	-5.47

Lowry and Dickson, 1915

%	(α)				
	6708 Å	5893 Å	5780 Å	5461 Å	4358 Å
20°					
100	+6.69	+7.45	+7.52	+7.50	+1.62
23	-6.30	-	-11.33	-13.95	-35.36

Pentachlorethane (C_2HCl_5) (b. t. = 162.0) +
Alcohols

Name	2nd Comp. Formula	Az			
		b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	46	155.65	0° (60%)
Glycol	$C_2H_6O_2$	197.4	12	154.55	-
Pinacol	$C_6H_{14}O_2$	174.35	16	158.9	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	65	153.65	+2.6 (60%)
Isopropyl lactate	$C_6H_{12}O_3$	166.8	-	161.8	-
Cyclohexanol	$C_6H_{12}O$	160.8	37	157.9	+0.9 (37%)
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	22	159.75	-3.8 (17%)

Pentachlorethane (C_2HCl_5) + Methyl-1-malate
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)				
	red	yellow	green	pale blue	dark blue violet
20°					
49.915	-0.32	+0.02	+0.38	+1.20	+1.76
24.9575	+1.84	+2.80	+3.49	+5.33	+6.49
12.4788	+3.21	+4.81	+6.25	+8.65	+10.18
5.001	+4.00	+6.00	+8.00	+10.80	+12.60
2.5005	+4.80	+6.40	+9.20	+11.20	+12.80

Propylchloride (C_3H_7Cl) (b. t. = 46.65) +
Alcohols

Name	Formula	Az			
		b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	10	40.6	-2.0 (10%)
Ethyl alcohol	C_2H_6O	78.3	6	44.95	-3.2 (10%)
Isopropyl alcohol	C_3H_8O	82.4	2.8	46.6	-2.8 (5%)

Isopropyl chloride (C_3H_7Cl) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	34.9	-
5	-	-2.5
6	32.3 Az	-
100	64.65	-

Isopropyl chloride (C_3H_7Cl) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	34.9	-
3	34.2 Az	-
10	-	-3.7
100	78.3	-

Propyl bromide (C_3H_7Br) + Methyl alcohol (CH_4O)

Holley and Weaver, 1905

%	b. t.
0	71.5
20.60	54.8 Az
100	64.0

Lecat, 1949

%	b. t.	Dt mix
0	71.0	-
21	54.6 Az	-
20	-	-3.6
100	64.65	-

Propyl bromide (C_3H_7Br) + Ethyl alcohol (C_2H_6O)

Holley and Weaver, 1905

%	b. t.	
0	71.5	
16.24	63.6	Az
100	78.4	

Lecat, 1949

%	b. t.		Dt mix
0	71.0		
18	62.75	Az	
20	-		-4.5
100	78.3		

Propyl bromide (C_3H_7Br) + Propyl alcohol (C_3H_8O)

Holley and Weaver, 1905

%	b. t.	
0	71.5	
10	69.75	Az
100	95.6	

Lecat, 1949

Propyl bromide (C_3H_7Br) (b. t. = 71.0) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	9.5	69.8	-3.5 (10%)
Isopropyl alcohol	C_3H_8O	82.4	20.5	66.75	-4.8 (20%)
Tert. butyl alcohol	$C_4H_{10}O$	82.45	12	68.0	-3.2 (10%)
Allyl alcohol	C_3H_6O	96.85	8	69.3	-4.7 (20%)

Isopropyl bromide (C_3H_7Br) (b. t. = 59.4) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	14.5	49.0	-3.8 (14%)
Ethyl alcohol	C_2H_6O	78.3	11.5	54.6	-3.8 (35%)
Isopropyl alcohol	C_3H_8O	82.4	7.0	57.7	-4.0 (10%)
Tert. butyl alcohol	$C_4H_{10}O$	82.45	12	68.0	-3.2 (10%)

Propyl iodide (C_3H_7I) (b. t. = 102.4) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	50	63.1	-3.0 (40%)
Ethyl alcohol	C_2H_6O	78.3	44	74.9	-4.0 (23%)
Propyl alcohol	C_3H_8O	97.2	29	90.3	-4.8 (30%)
Isopropyl alcohol	C_3H_8O	82.4	44	79.2	-4.5 (50%)
Butyl alcohol	$C_4H_{10}O$	117.8	13.5	99.1	-4.8 (25%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	23	96.2	-4.2 (50%)
Tert. butyl alcohol	$C_4H_{10}O$	82.45	-	81.4	-4.0 (50%)
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	30	97.2	-6.0 (30%)
Methoxyglycol	$C_3H_8O_2$	124.5	-	101.0	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	15	99.7	-

Isopropyl iodide (C_3H_7I) (b.t. = 89.45) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	35	60.6	-3.2 (60.6%)
Ethyl alcohol	C_2H_6O	78.3	25	70.2	-4.3 (70.2%)
Propyl alcohol	C_3H_8O	97.2	17	82.95	-5.0 (20%)
Isopropyl alcohol	C_3H_8O	82.4	30	75.5	-5.5 (30%)
Butyl alcohol	$C_4H_{10}O$	117.8	6	88.6	-4.8 (30%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	12	86.8	-3.8 (30%)
Sec. butyl alcohol	$C_4H_{10}O$	99.5	17.25	89.4	-5.5 (17.25%)
Tert. butyl alcohol	$C_4H_{10}O$	82.45	31	77.75	-
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	8	88.6	-5.5 (50%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	8	88.5	-

Acetone dichloride ($C_3H_6Cl_2$) (b.t. = 70.4) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	21	55.7	-2.8 (20%)
Ethyl alcohol	C_2H_6O	78.3	16	63.7	-4.8 (15%)
Propyl alcohol	C_3H_8O	97.2	11	70.1	-6.0 (12%)
Isopropyl alcohol	C_3H_8O	82.4	17	66.8	-
Allyl alcohol	C_3H_6O	96.85	-	70.0	-

Propylene chloride ($C_3H_6Cl_2$) + Isopropyl alcohol
(C_3H_8O)

Fordyce and Simonsen, 1949

%		b. t.
L	V	
760 mm		
0.0	0.1	94.2
1.1	5.8	91.1
2.8	13.6	87.6
6.9	25.2	82.6
17.1	35.3	79.0
27.2	41.0	77.9
38.0	45.7	77.7
48.5	49.8	77.5
62.3	56.3	77.6
75.3	65.0	78.1
88.0	76.8	79.0
100.0	96.8	80.5

%		%	
L	V	L	V
30°			
6.3	13.5	49.7	36.3
19.1	25.5	66.6	49.2
20.3	25.4	81.2	64.3
33.1	31.0	93.0	83.4
38.2	32.8		

Lecat, 1949

Propylene bromide ($C_3H_6Br_2$) (b.t. = 140.5) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	61	117.1	-4.0 (60%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	98	128.5	-6.0 (50%)
Glycol	$C_2H_6O_2$	197.4	6	139.0	-
Methoxy-glycol	$C_3H_8O_2$	124.5	-	124.0	-0.2 (90%)
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	50	131.5	-2.0 (50%)
Ethylene chlorhydrin	C_2H_5OCl	128.0	-	126.0	-2.0 (90%)
Ethylene bromhydrin	C_2H_5OBr	150.2	-	137.0	-

Dibromopropane ($C_3H_6Br_2$) + Ethyl tartrate ($C_8H_{14}O_6$)

Lowry and Dickson, 1915

%	6708 Å	5893 Å	5780 Å	5461 Å	4358 Å
100	+6.69	+7.45	+7.52	+7.50	+1.62
20	-1.50	-3.40	-4.40	-6.40	-23.35

Lecat, 1949

Trimethylene bromide ($C_3H_6Br_2$) (b.t. = 166.9) + Alcohols

2nd Comp.		Az		Dt mix.	
Name	Formula	b. t.	%	b. t. or Sat. t.	
Glycol	$C_2H_6O_2$	197.4	10.2	160.2	85.7 (10.2%)
Butoxyglycol	$C_6H_{14}O_2$	171.15	23	164.55	-2.4 (25%)
Furfuryl alcohol	$C_5H_6O_2$	169.35	-	164.0	-

Lecat, 1949

Trichlorhydrin ($C_3H_5Cl_3$) (b.t. = 156.85) + Alcohol

2nd Comp.		Az		Dt mix	
Name	Formula	b. t.	%	b. t.	
Hexyl alcohol	$C_6H_{14}O$	157.85	40	152.8	-
Glycol	$C_2H_6O_2$	197.4	14	152.5	-
Cyclohexanol	$C_6H_{12}O$	160.8	31	154.9	-1.7 (35%)
Ethyllactate	$C_5H_{10}O_3$	154.1	15	153.7	+0.8 (53%)

Butyl chloride (C_4H_9Cl) (b.t. = 78.5) + Alcohols
Lecat, 1949

2nd Comp.		Az		Dt mix	
Name	Formula	b. t.	%	b. t.	
Methyl alcohol	CH_4O	64.65	32	60.9	-2.4 (32%)
Ethyl alcohol	C_2H_6O	78.3	21.5	66.2	-2.8 (20%)
Propyl alcohol	C_3H_8O	97.2	16	75.6	-2.0 (10%)
Isopropyl alcohol	C_3H_8O	82.4	23	71.0	-3.5 (20%)
Butyl alcohol	$C_4H_{10}O$	117	1.9	77.7	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	4	78.0	-1.5 (5%)

Butyl chloride (C_4H_9Cl) + sec. Butyl alcohol-d
($C_4H_{10}O$)

Veltmans, 1926

%	d	(α) _D
20°		
0	0.8862	0
20	0.8684	2.94
39.8	0.8500	5.64
60	0.8342	8.27
80	0.8203	10.82
100	0.8069	13.87

Lecat, 1949

Butyl chloride (C_4H_9Cl) (b.t. = 78.5) + Alcohols

2nd Comp.		Az		Dt mix	
Name	Formula	b. t.	%	b. t.	
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	8	77.7	
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	20	72.8	
Allyl alcohol	C_3H_6O	96.85	15	74.5	

Isobutyl chloride (C_4H_9Cl) (b.t. = 68.85) +
Lecat, 1949 Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	22	53.05	-2.3
Ethyl alcohol	C_2H_6O	78.3	16.3	61.45	-2.5 (15%)
Propyl alcohol	C_3H_8O	97.2	16	67.55	-2.1 (10%)
Isopropyl alcohol	C_3H_8O	82.4	17	64.45	-3.% (10%)
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	11	66.5	-
Allyl alcohol	C_3H_6O	96.85	6	67.0	-2.8 (10%)

Sec. Butyl chloride (C_4H_9Cl) + Butyl alcohol
($C_4H_{10}O$)

Veltmans, 1926

%	d	(α) _D
20°		
100	0.8097	0
80	0.8221	-1.56
60	0.8350	-3.36
40.6	0.8470	-4.98
16.7	0.8622	-7.07
0	0.8726	-8.48

Sec. Butyl chloride (C_4H_9Cl) (b.t. = 68.25) +
Lecat, 1949 Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	20	52.7	-2.3 (20%)
Ethyl alcohol	C_2H_6O	78.3	15.8	61.2	-2.5 (15%)
Propyl alcohol	C_3H_8O	97.2	9	67.2	-2.5 (50%)
Isopropyl alcohol	C_3H_8O	78.3	18	64.0	-2.5 (10%)

Tert. Butyl chloride (C_4H_9Cl) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	50.8	-1.6
10	-	
11	43.6 Az	
100	64.65	

Tert. Butyl chloride (C_4H_9Cl) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	50.8	-1.8
7.5	48.5 Az	
10	-	
100	78.3	

Butyl bromide (C_4H_9Br) (b.t. = 101.5) + Alcohols
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	59	63.5	-2.8 (25%)
Ethyl alcohol	C_2H_6O	78.3	45	75.3	-3.6 (25%)
Propyl alcohol	C_3H_8O	97.2	30	90.5	-3.7 (20%)
Isopropyl alcohol	C_3H_8O	82.4	50	79.6	-3.2 (50%)

Butyl bromide (C_4H_9Br) (b.t. = 101.5) + Alcohols
Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	13	98.6	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	22	95.8	-2.3 (20%)
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	30	93.0	-3.0 (50%)
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	63	81.8	-3.7 (40%)
Diethyl carbinol	$C_5H_{12}O$	116.0	14	100.7	-
Methyl isopropyl carbinol	$C_5H_{12}O$	112.6	14	99.7	-3.5 (15%)
Dimethyl ethyl carbinol	$C_5H_{12}O$	102.35	28	97.8	-
Glycol	$C_2H_6O_2$	197.4	1.7	101.3	-
Allyl alcohol	C_3H_6O	96.85	30	89.5	-4.4 (20%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	10	99.5	-

Butyl bromide (C_4H_9Br) + Butyl alcohol ($C_4H_{10}O$)

Smyth and Engel, 1929

mol%	P_1	P_2
50°		
0	127.0	0
14.55	116.6	15.8
21.40	113.6	17.3
25.94	111.2	18.4
28.15	109.6	19.0
38.98	104.9	20.9
50.33	97.6	22.4
52.26	97.1	21.9
57.90	92.5	22.7
63.68	80.2	23.3
70.93	78.7	24.3
77.51	67.5	25.3
88.32	43.3	27.2
93.83	26.3	27.9
97.39	16.2	27.5
100	0	33.3

Smyth, Engel and Wilson, 1929

mol%	n_D	mol%	n_D
20°			
100	1.39942	54.80	1.41870
94.94	1.40177	52.20	1.41970
86.06	1.40570	45.16	1.42240
82.89	1.40698	23.78	1.43065
73.27	1.41124	18.12	1.43291
64.20	1.41500	0.00	1.43994
58.45	1.41690		

Isobutyl bromide (C_4H_9Br) (b.t. = 91.4) +
Lecat, 1949 Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	42	61.55	-3.3 (25%)
Ethyl alcohol	C_2H_6O	78.3	33	72.5	-4.3 (30%)
Propyl alcohol	C_3H_8O	97.2	21	85.2	-3.5 (20%)
Isopropyl alcohol	C_3H_8O	82.4	32	77.5	-4.1 (32%)
Butyl alcohol	$C_4H_{10}O$	117.8	7	90.7	-1.8 (7%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	16	89.2	-3.5 (20%)
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	19.5	87.0	-4.0 (20%)
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	42	79.0	-3.8 (38%)
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	12	90.5	-2.9 (12%)
Glycol	$C_2H_6O_2$	197.4	0.8	91.35	-
Allyl alcohol	C_3H_6O	96.85	18	84.5	-4.0 (18%)

Isobutyl bromide (b.t.=89.2) + Alcohols. Holley and Weaver, 1905					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	
Methyl alcohol	(CH ₄ O)	64.0	44-59	60.0	
Ethyl alcohol	(C ₂ H ₆ O)	78.4	41.0	71.4	
Propyl alcohol	(C ₃ H ₈ O)	95.6	18.25	86.1	
Sec.Butyl bromide (C ₄ H ₉ Br) + Butyl alcohol (C ₄ H ₁₀ O) Houston, 1933					
mol%	n _D	mol%	n _D		
20°					
100	1.3983	43.73	1.4192		
91.49	1.4013	32.64	1.4242		
83.06	1.4042	24.80	1.4275		
74.25	1.4073	11.67	1.4329		
63.33	1.4117	0	1.4370		
55.14	1.4138				
Az : 29.0mol% 87.2° (749 mm) n _D = 1.4256					
sec.Butyl bromide (C ₄ H ₉ Br) (b.t.=91.2) + Alcohols Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH ₄ O	64.65	41.5	61.5	-3.2 (25%)
Ethyl alcohol	C ₂ H ₆ O	78.7	33	72.5	-
Propyl alcohol	C ₃ H ₈ O	97.2	20.5	85.3	-3.5 (20%)
Isopropyl alcohol	C ₃ H ₈ O	82.4	34	77.5	-
Butyl alcohol	C ₄ H ₁₀ O	117.8	6	90.6	-
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	14	88.6	-
Sec.Butyl alcohol	C ₄ H ₁₀ O	99.5	20	87.5	-3.5 (15%)
Tert.Butyl bromide (C ₄ H ₉ Br) (b.t. = 73.25) + Alcohols Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH ₄ O	64.65	23	55.6	-2.8 (23%)
Propyl alcohol	C ₃ H ₈ O	97.2	8	71.5	-
Isopropyl alcohol	C ₃ H ₈ O	82.4	20	68	-3.0 (50%)
Tert.Butyl alcohol	C ₄ H ₁₀ O	82.45	15	69.95	-
Butyl iodide (C ₄ H ₉ I) (b.t. = 130.4) + Alcohols Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Ethyl alcohol	C ₂ H ₆ O	78.3	-	78.15	-1.2 (50%)
Propyl alcohol	C ₃ H ₈ O	97.2	66	96.2	-2.8 (60%)
Butyl alcohol	C ₄ H ₁₀ O	117.8	41.5	113.8	-4.2 (40%)
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	50	106.2	-3.6 (50%)
Amyl alcohol	C ₅ H ₁₂ O	138.2	15	117.0	-2.5 (25%)
Isobutyl carbinol	C ₅ H ₁₂ O	131.9	28	123.2	-4.5 (30%)
Methyl propyl carbinol	C ₅ H ₁₂ O	119.8	46	117.0	-5.0 (30%)
Allyl alcohol	C ₃ H ₆ O	96.85	74	96.4	-4.0 (50%)
Glycol	C ₂ H ₆ O ₂	197.4	5	128.5	-
Cyclopentanol	C ₅ H ₁₀ O	140.85	16	126.0	-
Methoxy-glycol	C ₃ H ₈ O ₂	124.5	-	115.5	--
Ethoxy-glycol	C ₄ H ₁₀ O ₂	135.3	30	123.0	-
Propoxy-glycol	C ₅ H ₁₂ O ₂	151.35	-	130.0	-
Methyl lactate	C ₄ H ₈ O ₃	143.8	20	128.5	-
Ethylene chlorhydrine	C ₂ H ₅ OC1	128.6	38	117.5	-
Dichlor-ethanol	C ₂ H ₄ OC1 ₂	146.2	15	128.0	-

2-Chlor-1-propanol	C_3H_7OCl	133.7	30	123.5	-
1-Chlor-2-propanol	C_3H_7OCl	127.0	45	120.0	-

Isobutyl iodide (C_4H_9I) (b.t. = 118 - 119) +
Alcohols
Ryland, 1899

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	
Methyl alcohol	CH_4O	64.5 - 65	70	63.5 - 64.5	
Ethyl alcohol	C_2H_6O	77.5 - 78	70	76.5 - 77.5	
Propyl alcohol	C_3H_8O	97.5	45	92.5 - 93.5	
				(753mm)	
Isopropyl alcohol	C_3H_8O	81 - 82	70	81 - 82	
				(761mm)	
Butyl alcohol	$C_4H_{10}O$	105.3 - 106.3	33	101 - 102	
				(765mm)	
Amyl alcohol	$C_5H_{12}O$	128 - 129	20	115 - 116	

Sec. Butyl iodide (C_4H_9I) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	
0	120.0	
65	64.60	Az
100	64.65	

Isobutyl iodide (C_4H_9I) (b.t. = 120.8) +
Alcohols
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dr mix
Methyl alcohol	CH_4O	64.65	75	64.60	-1.3 (50%)
Ethyl alcohol	C_2H_6O	78.3	71.5	77.4	-3.0 (27%)
Propyl alcohol	C_3H_8O	97.2	66	96.2	-2.8 (60%)
Isopropyl alcohol	C_3H_8O	82.4	75	82.0	-2.5 (75%)
Butyl alcohol	$C_4H_{10}O$	117.8	29	110.0	-3.8 (30%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	34	103.85	-3.0 (34%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	17	117.5	-4.5 (30%)
Allyl alcohol	C_3H_6O	197.4	3.5	119.5	-
Methoxy-glycol	$C_3H_8O_2$	124.5	25	110.5	-
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	-	117.5	-
Methyl lactate	$C_4H_8O_3$	143.8	6	120.0	-
Ethylene chlorhydrine	C_2H_5OCl	118.6	30	112.5	-
Dichlor-ethanol	$C_2H_4OCl_2$	146.2	-	120.5	-
1-Chlor-2-propanol	C_3H_7OCl	127.0	25	115.0	-

Sec. Butyl iodide (C_4H_9I) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.	
0	120.0	
70	77.2	Az
100	78.3	

Isoamyl chloride ($C_5H_{11}Cl$) (b. t. = 99.4) +
Alcohols
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	56	62.0	-1.8 (20%)
Ethyl alcohol	C_2H_6O	78.3	43	74.7	-2.3 (25%)
Propyl alcohol	C_3H_8O	97.2	29	89.0	-2.0 (15%)
Isopropyl alcohol	C_3H_8O	82.4	44	79.0	-
Butyl alcohol	$C_4H_{10}O$	117.8	12	97.0	-2.2 (12%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	20	94.5	-2.8
sec. Butyl alcohol	$C_4H_{10}O$	99.5	29	91.5	-
tert. Butyl alcohol	$C_4H_{10}O$	82.45	59	81.15	-
tert. Amyl alcohol	$C_5H_{12}O$	102.35	26.5	95.85	-3.0 (17%)
Allyl alcohol	C_3H_6O	96.85	29	88.3	-4.2 (20%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	14	97.8	-2.0 (10%)

Amyl bromide ($C_5H_{11}Br$) + Propyl alcohol (C_3H_8O)

Holley, 1902

%	b. t.	%	b. t.
763 mm			
100.00	95.5	43.01	94.5
94.42	95.2	40.50	94.7
88.05	94.8	35.35	95.2
83.78	94.6	29.02	95.9
79.55	94.4	23.24	96.9
74.81	94.2	18.23	98.3
70.70	94.0	14.81	99.6
66.99	94.1	11.38	101.6
63.69	94.15	8.77	103.85
59.85	94.2	6.49	106.2
55.98	94.25	4.36	109.1
52.09	94.3	2.14	112.6
47.94	94.4	0.00	118.2
46.60	94.4		

Amyl bromide ($C_5H_{11}Br$) + Isobutyl alcohol
($C_4H_{10}O$)

Holley, 1902

%	b. t.	%	b. t.
757.4mm			
100.00	105.0	51.37	103.7
94.88	104.3	48.10	103.75
89.50	104.0	44.32	103.8
84.33	103.8	38.08	104.1
79.92	103.65	31.28	104.6
76.35	103.6	25.55	105.4
72.96	103.55	20.56	106.2
69.36	103.5	16.55	107.4
66.63	103.45	12.22	109.0
63.63	103.4	7.89	111.2
60.70	103.45	6.01	112.9
57.48	103.5	2.73	115.0
54.56	103.6	0.00	118.1

Amyl bromide ($C_5H_{11}Br$) + Amyl alcohol ($C_5H_{12}O$)

Holley, 1902

%	b. t.	%	b. t.
763.7mm			
0.00	117.9	57.00	119.5
2.32	117.2	56.71	119.0
4.96	116.8	62.09	120.3
8.61	116.35	67.60	121.5
12.67	116.15	73.14	122.7
16.60	116.3	78.97	124.0
20.78	116.4	82.68	124.9
26.88	116.8	86.72	126.0
34.42	117.25	90.98	127.0
40.62	117.9	95.77	128.1
46.02	118.4	100.00	129.0
52.56	118.9		

Isoamyl bromide ($C_5H_{11}Br$) (b.t. = 120.65) +
Alcohols

Lecat, 1949

Name	2nd Comp. Formula	Az			
		b.t.	%	b.t.	Dt mix
Ethyl alcohol	C_2H_6O	78.3	74	77.7	-3.5 (25%)
Propyl alcohol	C_3H_8O	97.2	58	95.35	-2.5 (50%)
Butyl alcohol	$C_4H_{10}O$	117.8	31.5	110.6	-3.3 (30%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	44	104.55	-3.5 (40%)
Amyl alcohol	$C_5H_{12}O$	138.2	15	118.2	-3.2 (20%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	16	117.95	-4.0 (30%)
Methyl propyl carbinol	$C_5H_{12}O$	119.8	26	115.0	-4.5 (25%)
Allyl alcohol	C_3H_6O	96.85	45	93.15	-1.5 (75%)
Glycol	$C_2H_6O_2$	197.4	5.5	119.45	-
Methoxyglycol	$C_3H_8O_2$	124.5	20	111.5	-0.8 (10%)
Ethoxyglycol	$C_4H_{10}O_2$	135.3	8	118.0	-0.5 (5%)
Ethylene chlorhydrine	C_2H_5OC1	128.6	24	113.0	-3.5 (40%)
2-Chlor-1-propanol	C_3H_7OC1	133.7	15	118.0	-
1-Chlor-2-propanol	C_3H_7OC1	127.0	30	115.5	-
Ethylene bromhydrin	C_2H_5OBr	150.2	7	119.5	-

Isoamyl iodide ($C_5H_{11}I$) + Propyl alcohol (C_3H_8O)

von Zawidzki, 1903

mol%		mol%	
L	V	L	V
44.9°		49.9°	
100	100	100	100
96.90	94.60	98.40	97.74
96.27	94.84	95.51	94.20
92.18	90.68	95.59	94.24
92.31	90.83	95.68	94.33
87.26	70.05	92.31	91.09
87.26	70.05	87.97	88.05
82.70	84.48	83.38	85.44
70.23	80.54	78.16	83.28
59.28	77.86	77.77	83.21
47.76	75.93	77.00	82.88
		76.22	82.88
60°		60°	
100	100	88.26	89.11
98.85	98.51	83.36	86.56
98.92	98.44	83.08	86.45
97.28	96.60	82.67	86.23
95.32	94.11	82.30	86.09
94.98	94.10	81.95	85.90
91.40	91.17	80.79	85.44
91.40	91.17	80.30	85.22
88.30	89.11		
70°		70°	
100	100	88.37	90.16
96.93	96.54	80.92	86.72
96.93	96.54	80.30	86.60
89.97	91.15	76.09	84.95
88.46	90.24	75.24	84.82
%		%	
n_D		n_D	
25.1°			
100	1.38308	34.94	1.43453
88.26	1.38976	26.21	1.44541
77.59	1.39653	17.19	1.45792
62.79	1.40740	13.22	1.46419
54.65	1.41433	6.78	1.47559
46.57	1.42071	2.88	1.48292
39.85	1.42881	0	1.48863

Holley, 1902

%	b. t.	%	b. t.
753.5 mm			
100.00	95.7	36.50	97.6
93.36	95.6	30.27	98.4
89.94	95.65	24.90	99.7
79.91	95.7	19.19	101.4
73.06	95.8	14.78	103.4
66.16	95.9	11.48	105.6
59.90	96.1	8.64	108.2
54.38	96.3	5.95	110.8
46.15	96.6	3.07	115.6
41.08	96.9	0.00	146.5 (sic)

Isoamyl iodide ($C_5H_{11}I$) (b.t. = 147.65) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	72	117.1	-3.5 (50%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	33	129.7	-3.0 (50%)
Hexyl alcohol	$C_6H_{14}O$	157.85	13	145.2	-3.5 (15%)
Glycol	$C_2H_6O_2$	197.2	-	139.0	-
Pinacol	$C_6H_{14}O_2$	174.35	10	145.5	-
Ethoxyglycol	$C_4H_{10}O_2$	135.3	60	132.0	-
Propoxyglycol	$C_5H_{12}O_2$	151.35	-	143.0	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	55	124.0	-
Dichloroethanol	$C_2H_4OCl_2$	146.2	50	138.5	-
Ethylene iodhydrin	C_2H_5OI	176.5	23	145.8	-
1,3-Dichloropropanol	$C_3H_6OCl_2$	175.8	4	147.4	-
Methyl lactate	$C_4H_8O_3$	143.8	52	139.0	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	35	144.5	-
Cyclonexanol	$C_6H_{12}O$	160.8	8	146.5	-1.9 (10%)

Isoamyl iodide($C_5H_{11}I$) + Isobutyl alcohol ($C_4H_{10}O$)

Holley, 1902

%	b.t.	%	b.t.
748 mm			
100.00	104.8	36.86	106.9
94.88	104.7	29.92	107.8
83.36	104.7	25.39	108.7
82.35	104.8	19.20	110.4
74.99	105.0	14.48	112.6
67.56	105.3	11.00	115.0
59.67	105.5	7.73	117.8
53.87	105.8	5.26	121.0
47.88	106.1	2.32	126.0
43.40	106.2	0.00	146.5

Isoamyl iodide ($C_5H_{11}I$) + Amyl alcohol ($C_5H_{12}O$)

Holley, 1902

%	b.t.	%	b.t.
758.5 mm			
100.00	128.9	45.84	127.6
93.57	128.6	40.48	128.0
87.47	128.4	35.60	128.6
81.19	128.3	30.32	129.3
74.80	128.2	21.28	130.6
70.19	128.18	18.12	132.0
67.46	128.05	12.64	133.7
63.26	127.9	10.10	135.2
60.08	127.7	7.43	136.5
56.18	127.4	3.16	140.5
51.98	127.3	2.04	142.3
48.89	127.4	0.00	146.5

Hexyl bromide ($C_6H_{13}Br$) (b.t.=156.5) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	40	150.5	-3.2 (35%)
Glycol	$C_2H_6O_2$	197.4	14	150.5	-
Butoxyglycol	$C_6H_{14}O_2$	171.15	-	156.0	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	75	126.5	-2.8 (50%)
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	15	154.5	-
Cyclohexanol	$C_6H_{12}O$	160.8	34	153.7	-2.8 (35%)

Dodecyl chloride ($C_{12}H_{25}Cl$) + Butyl alcohol
($C_4H_{10}O$)

Hoerr and Harwood, 1951

%	f.t.
86.1	-30.0
61	-20.0

Dodecyl iodide ($C_{12}H_{25}I$) + Isopropyl alcohol
(C_3H_8O)

Hoerr and Harwood, 1951

%	f.t.
100.0	-30.0
97.8	-20.0
87.5	-10.0
5.2	0.0

Dodecyl iodide ($C_{12}H_{25}I$) + Butyl alcohol ($C_4H_{10}O$)

Hoerr and Harwood, 1951

%	f. t.
0.9	-30.0
5.6	-20.0
23.8	-10.0
95.1	0.0

Cetyl iodide ($C_{16}H_{33}I$) + Butyl alcohol ($C_4H_{10}O$)

Hoerr and Harwood, 1951

%	f. t.
lower than 0.08	0.0
6.1	10.0
87.8	20.0

Vinylbromide (C_2H_3Br) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.
0	15.8
-	15.7 Az
100	64.65

1,1-Dichlor ethylene ($C_2H_2Cl_2$) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.
0	31
6	27.5 Az
100	64.7

1,2-Dichlorethylene ($C_2H_2Cl_2$) + Ethyl alcohol
(C_2H_6O)

Chavanne, 1913

%	b. t.
	Cis.
6.0	46.3
	Trans.
9.8	57.7

Dichlorethylene cis. ($C_2H_2Cl_2$) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	60.25	
15	51.4 Az	-2.7
100	64.65	

Alpert and Elving, 1951

b. t.	mol%	b. t.	mol%
L	V	L	V
760 mm			
64.6	100	100	52.0
63.3	97.1	91.1	51.8
61.8	95.2	86.3	51.5
60.6	93.0	81.3	51.8
58.0	86.4	66.9	51.9
56.9	83.1	62.9	52.3
56.0	80.4	60.9	52.9
54.5	74.1	54.6	55.4
53.7	68.6	49.6	56.3
53.1	63.5	46.1	57.8
52.6	60.0	44.1	60.3
52.4	57.4	42.4	

mol%	n_D	mol%	n_D
20°			
100	1.3287	40	1.4163
90	1.3482	30	1.4253
80	1.3653	20	1.4338
70	1.3801	10	1.4412
60	1.3942	0	1.4483
50	1.4061		

Dichlorethylene cis. ($C_2H_2Cl_2$) + Ethyl Alcohol
(C_2H_6O)
Lecat, 1949

%	b. t.
0	60.25
10.2	57.8 Az
100	78.3

Dichlorethylene trans. ($C_2H_2Cl_2$) + Methyl alcohol
(CH_4O)

Alpert and Elving, 1951

mol%	n_D	mol%	n_D
20°			
100	1.3287	40	1.4128
90	1.3480	30	1.4219
80	1.3629	20	1.4302
70	1.3777	10	1.4380
60	1.3909	0	1.4455
50	1.4027		

b. t.	L	V	b. t.	L	V
64.6	100	100	43.0	56.2	27.2
63.4	99.3	94.9	42.4	44.0	26.7
60.9	97.9	86.2	42.0	29.0	24.2
60.5	97.2	84.2	42.0	26.3	24.0
56.5	94.2	69.6	41.9	23.1	23.1 Az
52.3	88.8	54.8	42.3	11.4	21.0
51.1	86.6	51.5	43.1	3.5	17.0
48.1	82.3	46.2	44.8	1.3	9.4
46.0	75.4	40.7	46.0	0.4	5.6
44.8	70.6	34.7	48.3	0	0
44.3	65.7	32.0			

Dichlorethylene ($C_2H_2Cl_2$) + Methyl malate I
cis + trans. ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)				
	red	yellow	green	pale blue	dark blue
					violet

20°						
50.088	-1.90	-2.70	-2.80	-2.20	-1.50	-1.10
25.044	-0.20	-0.12	+0.48	+1.56	+1.96	-
12.522	+0.80	+1.12	+1.84	+2.87	+4.15	-
5.011	+1.20	+2.79	+4.79	+5.99	+7.58	+9.98
2.5055	+2.00	+3.19	+5.19	+6.79	+8.38	-

Dihalogen ethylenes+ Alcohols.

Lecat, 1949

Name	Formula	b. t.	Az %	b. t.
Dibromethylene cis.	$C_2H_2Br_2$	112	67.5	77.8
+ Ethyl alcohol	C_2H_6O	78.3		
Dibrompropylene cis.	$C_3H_4Br_2$	135.2	96.55	97.05
+ Propyl alcohol	C_3H_8O	97.2		
Dibromethylene trans.	$C_2H_2Br_2$	108	37	76.0
+ Ethyl alcohol	C_2H_6O	78.3		
Chloriodethylene cis.	C_2H_2ICl	116	25	108.5
+ Butyl alcohol	$C_4H_{10}O$	117.8		
Chloriodethylene cis.	C_2H_2ICl	116	44.4	93.6
+ Propyl alcohol	C_3H_8O	97.2		
Chloriodethylene trans.	C_2H_2ICl	113	4	87.5
+ Propyl alcohol	C_3H_8O	97.2		
Bromiodethylene	C_2H_2BrI	149.05	67.6	117.3
+ Butyl alcohol	$C_4H_{10}O$	117.8		

Trichlorethylene (C_2HCl_3) + Methyl alcohol
(CH_4O)

Fritzweiler and Dietrich, 1933

L		V		b. t.		L		V		b. t.	
100	100	64.7	5.0	48.0	66	100	100	64.7	5.0	48.0	66
99.75	98.5	64	4.75	43.5	68	99.75	98.5	64	4.75	43.5	68
99.0	95	63	4.5	39.5	70	99.0	95	63	4.5	39.5	70
97.0	90	62	4.0	35.0	72	97.0	90	62	4.0	35.0	72
93.0	84.5	61	3.5	29.5	74	93.0	84.5	61	3.5	29.5	74
85.0	75	60	3.0	23.5	76	85.0	75	60	3.0	23.5	76
70.0	70 Az	59.3	2.5	17.5	78	70.0	70 Az	59.3	2.5	17.5	78
34.0	65	60	1.5	19.0	80	34.0	65	60	1.5	19.0	80
16.0	59	61	1.0	7.5	82	16.0	59	61	1.0	7.5	82
10.0	56	62	0.5	4.0	84	10.0	56	62	0.5	4.0	84
5.4	52.5	64	0	0	86.5	5.4	52.5	64	0	0	86.5

mol%	b.t.	dew point
100	64.6	64.6
95	61.3	63.0
90	60.3	62.0
85	59.8	61.1
80	59.4	60.4
75	59.3	59.9
70	"	59.3 Az
65	"	59.8
60	"	60.7
55	59.4	62.5
50	59.6	65.0
45	59.7	67.2
40	59.8	69.6
35	60.0	71.9
30	60.1	73.9
25	60.3	75.5
20	60.7	77.2
15	61.1	79.0
10	62.0	81.0
5	63.0	83.3
0	86.4	86.4

Trichlorethylene (C_2HCl_3) (b.t.=86.9) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	36	60.15	+1.2 (35%)
Ethyl alcohol	C_2H_6O	78.3	27	70.9	-0.8 (28%)
Propyl alcohol	C_3H_8O	97.2	17	81.75	-2.6 (15%)
Isopropyl alcohol	C_3H_8O	82.4	30	75.5	-2.9 (36%)
Butyl alcohol	$C_4H_{10}O$	117.8	3.0	86.65	-2.8 (10%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	9	85.35	-3.7 (8.5%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	15	84.2	-4.5 (15%)
tert. Butyl alcohol	$C_4H_{10}O$	82.45	32	77.0	-4.5 (15%)
tert. Amyl alcohol	$C_5H_{12}O$	102.35	7.5	86.63	-3.6 (18%)
Allyl alcohol	C_3H_6O	96.85	16	80.95	-2.8 (16%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	2.5	86.55	-2.4 (48%)

Trichlorethylene (C_2HCl_3) + Ethyl alcohol
(C_2H_6O)

Fritzweiler and Dietrich, 1933

mol%		b.t.		mol%		b.t.
L	V			L	V	
100	100	78.2	30	48	71	
99.5	95.5	77	14	40.5	72	
98	90	76	7	37	73	
95	84.5	75	5	35	74	
92	78	74	4	30	76	
88.5	71.5	73	3	27	78	
82.5	65.5	72	2	20.5	80	
71	58	71	1	13.5	82	
53.5	53.5	70.9 Az	0.5	7	84	

mol%	b.t.	dew point
100	78.3	78.3
95	75.0	76.9
90	73.5	76.0
85	72.3	75.1
80	71.7	74.3
75	71.2	73.6
70	71.0	72.8
65	70.9	71.9
60	70.8	71.2
55	70.7	70.7
50	70.7	70.7
45	70.7	71.2
40	70.8	72.0
35	70.9	74.0
30	71.0	76.4
25	71.2	78.7
20	71.4	80.1
15	71.4	81.6
10	72.4	83.0
5	74.0	84.7
0	86.4	86.4

Trichlorethylene (C_2HCl_3) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc		(α)				
		red	yellow	green	pale blue	dark blue violet
20°						
50.555	-1.09	-1.98	-0.79	-0.40	-0.20	-0.10
25.2775	+0.71	+0.91	+2.06	+3.48	+4.23	-
12.6388	+1.58	+3.16	+5.22	+6.49	+8.70	-
4.911	+2.85	+5.09	+7.53	+11.00	+13.03	+14.66
2.4555	+3.67	+5.70	+8.55	+12.22	+14.25	-

Perchloroethylene (C_2Cl_4) (b.t. = 121.1) + Alcohols

Lecat, 1949

Name	Formula	2nd Comp.		Az		Dt mix
		b.t.	%	b.t.	%	
Methyl alcohol	CH_4O	64.65	63.5	63.75	-2.1 (50%)	
Ethyl alcohol	C_2H_6O	78.3	65	76.65	-0.8 (71%)	
Propyl alcohol	C_3H_8O	97.2	48.5	94.05	-1.1 (55%)	
Isopropyl alcohol	C_3H_8O	82.4	72	81.65	-1.5 (70%)	
Butyl alcohol	$C_4H_{10}O$	117.8	29	108.95	-2.1 (29%)	
Isobutyl alcohol	$C_4H_{10}O$	108.0	40	103.05	-3.0 (40%)	
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	57	97.0	-1.6 (50%)	
Amyl alcohol	$C_5H_{12}O$	138.2	15	117.0	-2.5 (25%)	
Isoamyl alcohol	$C_5H_{12}O$	131.9	19	116.2	-2.7 (20%)	
Methyl propyl carbinol	$C_5H_{12}O$	119.8	34	113.2	-3.4 (30%)	
Dimethyl ethyl carbinol	$C_5H_{12}O$	102.35	73	101.4	-6.1 (30%)	
Allyl alcohol	C_3H_6O	96.85	45	93.15	-1.5 (75%)	
Glycol	$C_2H_6O_2$	197.4	6	119.1	-	
Methoxyglycol	$C_3H_8O_2$	124.5	24.5	109.8	-2.1 (21%)	
Ethoxyglycol	$C_4H_{10}O_2$	135.3	16.5	116.0	-1.2 (50%)	
Propoxyglycol	$C_5H_{12}O_2$	159.35	5	120.6	-2.8 (33%)	
Methyl-lactate	$C_4H_8O_3$	143.8	10	120.0	-	
Ethylene chlorhydrin	C_2H_5OCl	128.6	24	110.0	-2.3 (35%)	
Dichloroethanol	$C_2H_4OCl_2$	146.2	4	119.5	-	
2-Chlor-1-propanol	C_3H_7OCl	133.7	13	115.0	-1.2 (10%)	
1-Chlor-2-propanol	C_3H_7OCl	127.0	28	113.0	-1.8 (20%)	
Ethylene bromhydrin	C_2H_5OBr	150.2	15	116.5	-1.0 (10%)	
Cyclopentan-ol	$C_5H_{10}O$	140.85	8	118.8	-1.6 (10%)	

Trihalogen ethylenes + Alcohols.

Lecat, 1949

Name	Formula	Az		b.t.
		b.t.	%	
Dichlorobrom-ethylene as. +	C_2HCl_2Br	107	60.5	77.25
Ethyl alcohol	C_2H_6O	78.3		
Dichlorobrom-ethylene sym.cis. +	C_2HCl_2Br	113.8	69.1	77.4
Ethyl alcohol	C_2H_6O	78.3		
Chlorodibrom-ethylene +	C_2HClBr_2	138	-	117
Butyl alcohol	$C_4H_{10}O$	117.8		

Halogenpropylenes + Alcohols.

Lecat, 1949

Name	Formula	Az		b.t.
		b.t.	%	
1-Chlorpropylene cis. +	C_3H_5Cl	32.8	3	32.25
Ethyl alcohol	C_2H_6O	78.3		
1-Chlorpropylene trans. +	C_3H_5Cl	37.4	4	36.7
Ethyl alcohol	C_2H_6O	78.3		
2-Chlorpropylene +	C_3H_5Cl	22.65	3	22.0
Methyl alcohol	CH_4O	64.65		
2-Brompropylene +	C_3H_5Br	48.35	-	46.2
Ethyl alcohol	C_2H_6O	78.3		

Allylchloride (C_3H_5Cl) (b.t. = 45.3) + Alcohols
Lecat, 1949

Name	Formula	2nd Comp.		Az		Dt mix
		b.t.	%	b.t.	%	
Methyl alcohol	CH_4O	64.65	10	39.85	-	
Ethyl alcohol	C_2H_6O	78.4	5	43.5	-3.2 (10%)	
Isopropyl alcohol	C_3H_8O	82.4	2	42.25	-	

Allyl bromide (C_3H_5Br) (b.t. = 70.5) + Alcohols
Lecat, 1949

Name	Formula	2nd Comp.		Az		Dt mix
		b.t.	%	b.t.		
Methyl alcohol	CH_4O	64.65	10.5	54.0		-
Ethyl alcohol	C_2H_6O	78.3	17	62.8		-4.0 (15%)
Propyl alcohol	C_3H_8O	97.2	9.3	69.1		-3.8 (10%)
Isopropyl alcohol	C_3H_8O	82.4	20	66.0		-
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	10	68.5		-
Allyl alcohol	C_3H_6O	96.85	-	69.2		-

Allyl iodide (C_3H_5I) (b.t. = 101.8) + Alcohols
Lecat, 1949

Name	Formula	2nd Comp.		Az		Dt mix
		b.t.	%	b.t.		
Methyl alcohol	CH_4O	64.65	51	63.2		-
Ethyl alcohol	C_2H_6O	78.3	42	75.0		-4.0 (25%)
Propyl alcohol	C_3H_8O	97.2	28.5	90.0		-5.0 (30%)
Isopropyl alcohol	C_3H_8O	82.4	45	79.0		-3.2 (50%)
Butyl alcohol	$C_4H_{10}O$	117.8	13	98.7		-4.6 (30%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	21	95.8		-5.0 (30%)
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	25	97.2		-4.8
Allyl alcohol	C_3H_6O	96.85	28	89.4		-5.2 (20%)
Glycol	$C_2H_6O_2$	197.4	1.5	101.5		-
Methoxy-glycol	$C_3H_8O_2$	124.5	5	100.5		-
Ethylene chlorhydrin	C_2H_5OCl	128.6	14	99.2		-

Dichlorpropylene trans. ($C_3H_4Cl_2$) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

	%	b.t.	Dt mix
	0	96.25	
	46	74.65 Az	
	50	-	-1.6
	100	78.3	

Chlorbutenes (C_4H_7Cl) + Ethyl alcohol (C_2H_6O)
Lecat, 1949 (b.t. = 78.3)

isomere	b.t.	Az	
		%	b.t.
1 - 1 cis.	63.5	14.8	58.0
1 - 1 trans.	68.1	20.2	61.4
2 - 1	58.5	11.5	53.8
2 - 2 cis.	66.8	18.4	60.2
2 - 2 trans.	62.6	15.4	57.0

Brombutylenes (C_4H_7Br) + Ethyl alcohol (C_2H_6O)
(b.t. = 78.3)

Lecat, 1949

1st Comp.	b.t.	% Az	b.t.
1 Br - 1 cis.	86.15	27.6	69.7
1 Br - 1 trans.	94.7	35.75	72.9
2 Br - 2 cis.	93.9	33.65	72.3
2 Br - 2 trans.	85.55	26.7	69.1

Bornylchloride ($C_{10}H_{17}Cl$) + Isoamyl lactate
($C_8H_{16}O_3$)

Lecat, 1949

	%	b.t.
	0	207.2
	-	201.8 Az
	100	202.4

Chlortetrahydronaphthalene ($C_{10}H_{11}Cl$) + Ethyl alcohol (C_2H_5O)

Weissenberger, Henke and Katschenka, 1926

mol%	p
20°	
25	35.1
40	41.2
50	38.6
60	36.5
75	36.0
100	44.0

Pinene chlorhydrate ($C_{10}H_{17}Cl$) + Borneol($C_{10}H_{18}O$)

Efremov, 1915

mol%	f. t.	m. t.	tr. t.
100	207.0	207.0	69.1
99.13	206.4	206.0	68.5
97.37	202.8	200.6	66.8
95.59	199.7	197.4	65.0
91.51	193.6	190.2	60.3
81.97	183.5	177.9	47.0
77.31	178.4	172.7	39.2
72.86	174.8	167.6	-
63.00	166.2	158.4	-
53.20	158.1	150.0	-
43.00	158.1	150.0	-
43.00	149.9	141.6	-
32.70	140.8	134.7	-
27.41	137.7	132.5	-
22.01	134.6	130.2	-
11.19	127.5	124.7	-
5.62	125.9	123.4	-
3.38	124.5	123.0	-
1.14	123.5	122.4	-
0	123.0	-	-

Timmermans, 1930

mol%	f. t.	m. t.
0	128.0	128
10	131.5	129.2
20	135.5	129
30	141.5	131.5
40	148.5	135.5
50	156.5	141.5
60	164.5	148
70	173.5	158

Cholesteryl chloride ($C_{27}H_{45}Cl$) + Cholesterol ($C_{27}H_{46}O$)

Lettré, Barnbeck and Lege, 1936

%	f. t.	m. t.
100	147	146
88.5	144	89
79	139	88
69.3	135	"
59	129	"
50	121	"
40	114	"
30.5	104	"
20.5	91	"
10	93	"
0	96	95

Fluorbenzene (C_6H_5F) (b. t. = 84.9) + Alcohols
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
Methyl alcohol	CH_3O	64.65	32	59.7
Ethyl alcohol	C_2H_5O	78.3	27	69.5
Propyl alcohol	C_3H_8O	97.2	19	80.5
Isopropyl alcohol	C_3H_8O	82.4	33	75.5
Isobutyl alcohol	$C_4H_{10}O$	108.0	9	84.0
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	30	76.8

Fluorbenzene (C_6H_5F) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc		(α)				
		red	yellow	green	pale blue	dark violet blue
20°						
50.259	-3.84	-4.32	-5.21	-5.97	-6.80	-7.16
25.1295	-2.82	-3.34	-3.42	-3.58	-3.34	-
12.5648	-0.88	-1.11	-0.80	-0.48	-0.32	-
4.941	-0.61	-0.20	+0.20	+0.61	+1.01	+1.42

Chlorobenzene (C_6H_5Cl) + Methyl Alcohol (CH_3O)

Shakhparonov and Shlenkina, 1954

mol%	n_D	D	I
	20°	19° - 20°	
0	1.52445	0.598	4.57
13	1.51412	0.452	5.20
29	1.49799	0.250	7.20
41	1.48297	0.175	8.30
50	1.46967	0.148	8.60
64	1.45125	0.138	7.40
78	1.40775	0.142	5.00
100	1.32846	0.071	0.56

D - degree of the optical depolarisation

I - relative intensity of the molecular light dispersion

Chlorobenzene (C_6H_5Cl) + Ethyl alcohol (C_2H_6O)

Schulze, 1956

mol%	p	mol%	p
	25°		
0	11.70	83.34	57.73
5.27	40.98	90.11	58.64
9.02	44.63	91.71	58.43
14.97	47.37	95.00	58.32
26.93	50.28	96.06	58.78
58.99	55.44	97.08	58.66
65.38	55.53	98.02	58.90
68.26	56.34	98.94	58.98
79.58	57.74	100	59.06
	30.02°		
0	15.35	78.59	75.84
9.23	57.04	83.34	76.71
22.11	64.53	90.11	77.55
33.72	67.43	91.71	77.79
50.66	70.82	95.00	78.00
58.99	72.83	97.08	78.26
60.64	72.92	98.02	78.35
63.48	73.25	98.94	78.42
68.26	74.34	100	78.50
72.70	74.97		

Hirata, 1908

vol%	η
	(alcohol = 1)
	25°
25	0.9189
12.5	0.9674
6.25	0.9894
3.125	0.9972
1.5625	1.0012
0.78125	1.0029

Schulze, 1951

mol%	Q mix	mol%	Q mix
		25°	
0	0	64.6	88.1
2.21	63.1	64.6	93.7
6.1	111.0	70.8	72.8
9.42	141.7	78.9	47.1
27.8	164.1	88.2	20.7
44.4	144.1	96.46	3.89
56.8	113.4	100.0	0

Chlorobenzene (C_6H_5Cl) (b.t. = 131.75) + Alcohols.

Lecat, 1949

	2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	82	96.9	-1.3 (80%)
Butyl alcohol	$C_4H_{10}O$	117.8	54	115.35	-2.7 (45%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	63	107.2	-4.5 (50%)
Amyl alcohol	$C_5H_{12}O$	138.2	25	126.2	-2.5 (20%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	34	124.35	-3.3 (50%)
Methyl propyl carbinol	$C_5H_{12}O$	119.8	55	118.2	-4.0 (35%)

Chlorobenzene (C_6H_5Cl) (b.t. = 131.75) + Alcohols

Lecat, 1949

	2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Allyl alcohol	C_3H_6O	96.85	82.5	96.5	-2.6 (50%)
Glycol	$C_2H_6O_2$	197.4	56	130.8	-
Methoxyglycol	$C_3H_8O_2$	124.5	47.5	119.45	+0.6 (67%)
Ethoxyglycol	$C_4H_{10}O_2$	135.3	32	127.2	+0.1 (23%)
Methyl lactate	$C_4H_8O_3$	143.8	-	130.8	-1.3 (10%)
Cyclopentanol	$C_5H_{10}O$	140.85	20	128.5	-2.5 (20%)

Chlorbenzene (C_6H_5Cl) + Cyclohexanol ($C_6H_{12}O$)

Wheeler and Jones, 1952

%	n_D	%	n_D
25°			
100	1.46472	39.99	1.49400
91.25	1.46831	30.75	1.49955
83.75	1.47135	20.24	1.50624
75.41	1.47521	13.41	1.51121
69.00	1.47842	6.55	1.51658
60.29	1.48308	0	1.52195
50.97	1.48820		

Chlorbenzene (C_6H_5Cl) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc		(α)				
		red	yellow	green	pale blue	dark blue
20°						
50.442	-3.17	-3.77	-4.16	-4.66	-4.86	-5.15
25.221	-1.70	-1.55	-1.47	-1.31	-0.99	-
12.6105	0.00	+0.32	+0.63	+1.59	+2.38	-
5.023	+1.39	+2.39	+3.38	+4.38	+5.97	+7.57
2.5115	+3.19	+4.78	+6.37	+8.36	+9.56	-

Chlorbenzene (C_6H_5Cl) (b.t. = 131.75) + Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Ethylene chlorhydrine	C_2H_5OC1	118.6	42	119.95	-2.3 (49%)
Dichlor-ethanol	$C_2H_4OC1_2$	146.2	20	130.0	-2.5 (10%)
2-Chlor-1-propanol	C_3H_7OC1	133.7	36	126.0	-2.5 (30%)
1-Chlor-2-propanol	C_3H_7OC1	127.0	55	122.2	-2.5 (50%)
Ethylene bromhydrine	C_2H_5OBr	150.2	20	128.7	-1.5 (15%)
Ethanol amine	C_2H_7ON	170.8	13.5	128.55	-120 (13.5%)

Chlorbenzene (C_6H_5Cl) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Donald, 1908

t	d	t	d
0%		3.8059%	
17.05	1.10974	18.5	1.11071
24.12	1.10215	24.25	1.10451
38.53	1.08650	31.87	1.09622
10.0073%		24.9956%	
15.0	1.12025	14.7	1.13432
39.3	1.09382	36.0	1.11108
68.1	1.0622	63.2	1.0812
99.0	1.0278	99.0	1.0415
47.469%		75.345%	
17.9	1.15180	18.8	1.1797
36.3	1.13223	24.91	1.1732
65.5	1.1013	49.5	1.1472
101.3	1.0619		

%	d	(α) _D
20°		
0	1.10674	13.3
5.49034	1.11081	-
0	1.10657	13.3
3.8059	1.10909	11.87
10.0073	1.11481	10.14
24.996	1.12854	8.00
47.47	1.14957	6.98
75.345	1.1784	6.99

t	(α) _D	t	(α) _D
3.8059%		10.0073%	
13.8	11.02	11.3	8.74
17.4	11.55	21.7	10.41
23.6	13.65	32.0	11.97
40.0	14.45	40.1	12.96
43.7	14.86	47.8	13.82
		56.0	14.63
		100.0	17.19
24.9956%		47.469%	
13.0	6.75	9.1	5.39
24.8	8.78	13.1	5.92
38.8	10.68	21.9	7.22
44.6	11.32	37.9	9.37
59.3	12.87	46.5	10.40
68.7	13.71	57.3	11.49
100.0	15.66	67.2	12.29
		100.0	14.49
75.345%			
13.0	6.11	55.5	10.77
22.0	7.31	66.6	11.64
38.6	9.24		

Rule, Barnett and Cunningham, 1933			
mol%		α 5461	
20°			
3.7		+3.21	
20.9		10.11	
38.0		15.34	
50.1		20.23	
63.0		24.43	
79.1		30.30	
Brombenzene (C ₆ H ₅ Br) + Ethyl alcohol (C ₂ H ₆ O)			
Schulze, 1956			
mol%		p	
25°			
0	4.72	77.40	53.27
6.10	38.68	83.18	55.35
11.84	42.98	100	59.06
35.88	49.49		
30.02°			
0	5.67	41.42	63.70
6.50	47.11	60.75	67.00
16.59	56.56	77.39	70.46
22.57	58.92	100	78.50
Schulze, 1951			
mol%		Q mix	
25°			
0	0	63.6	121.8
0.882	28.2	77.0	71.3
2.76	75.9	88.18	32.26
14.5	170.7	99.29	1.73
38.6	182.4	100.0	0
53.8	151.0		

Brombenzene (C ₆ H ₅ Br) (b.t. = 156.1) + Alcohols Lecat, 1949						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Isoamyl alcohol	C ₅ H ₁₂ O	131.9	85	131.65	-4.2 (35%)	
Hexyl alcohol	C ₆ H ₁₄ O	157.85	34	151.6	-2.4 (30%)	
Glycol	C ₂ H ₆ O ₂	197.4	12	150.2	-	
Pinacol	C ₆ H ₁₄ O ₂	174.35	20	153.5	-	
Methyl lactate	C ₄ H ₈ O ₃	143.8	22	141.5	-0.8 (90%)	
Ethyl lactate	C ₅ H ₁₀ O ₃	154.1	58	150.1	-1.1 (58%)	
Isopropyl lactate	C ₆ H ₁₂ O ₃	166.8	12	155.2	-	
Ethoxy-glycol	C ₄ H ₁₀ O ₂	135.3	86	135.22	+0.7 (73%)	
Propoxy-glycol	C ₅ H ₁₂ O ₂	151.35	48	148.2	-	
Ethylene chlorhydrin	C ₂ H ₅ OC1	128.6	68	127.45	-2.2 (50%)	
Dichlor-ethanol	C ₂ H ₄ OC1 ₂	146.2	70	142.5	-3.5 (50%)	
Iodethanol	C ₂ H ₅ OI	176.55	25	153.5	-1.2 (15%)	
1,3-Dichlor-2-propanol	C ₃ H ₆ OC1 ₂	175.8	9	155.5	+2.9 (10%)	
Ethanolamine	C ₂ H ₇ ON	170.0	22	145.0	59.5 (22%)	
Cyclohexanol	C ₆ H ₁₂ O	160.8	31	153.6	-2.8 (35%)	
Brombenzene (C ₆ H ₅ Br) + Methyl malate 1 (C ₆ H ₁₀ O ₅)						
Grossmann and Landau, 1910						
gr/100cc		(α)				
red	yellow	green	pale blue	dark blue	violet	
20°						
50.666	-3.95	-4.24	-4.44	-4.93	-5.33	-4.84
25.333	-2.29	-2.57	-2.37	-2.09	-1.97	-
12.66665	-0.16	+0.16	+0.55	+0.87	+1.03	-
4.889	+0.61	+1.64	+2.86	+4.09	+5.11	+6.14
2.4445	+1.23	+3.27	+5.73	+8.18	+9.41	-

Brombenzene (C₆H₅Br) + Ethyl tartrate (C₈H₁₄O₆)

Patterson and Mc Donald, 1908

t	d	t	d
0%		9.93184%	
14.3	1.50188	18.6	1.45914
42.8	1.46425	36.1	1.43590
58.6	1.44313	59.0	1.4059
100.6	1.3862	100.6	1.3508
24.94%		47.967%	
19.4	1.4048	19.1	1.33699
38.0	1.3820	38.5	1.31434
61.6	1.352	61.0	1.2875
100.8	1.302	101.0	1.2392

%	d	(α) _D
20°		
0	1.49447	11.7
4.99987	1.47496	-
0	1.49434	11.7
9.93184	1.45728	9.6
24.94	-	7.86
47.967	1.33594	7.03

t	(α) _D	t	(α) _D
9.93184%		24.94%	
11.0	7.99	9.6	6.17
14.8	8.62	13.2	6.79
24.0	10.29	18.0	7.6
39.6	12.41	24.0	8.44
47.0	13.22	37.7	10.30
52.0	13.8	45.5	11.21
100.0	17.09	55.3	12.19
		62.5	12.89
47.967%		100.4	15.51
10.4	5.70	48.3	10.44
13.0	6.04	56.2	11.15
23.1	7.48	62.0	11.63
41.2	9.69	100.3	14.31

Iodobenzene (C₆H₅I) + Ethyl alcohol (C₂H₆O)

"
Ohlm, 1913.

c	η	c	Diffusion ratio
20°			
3	1330		
1.5	1309	1	0.81
0.7	1288	0.5	0.83
0.4	1278	0.25	0.84

c = N of iodbenzene

Iodobenzene (C₆H₅I) (b. t. = 188.45) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Ethanol	C ₂ H ₇ ON	170.8	45	161.0	-
amine					
Glycol	C ₄ H ₈ O ₃	190.9	-	184.0	-
monoacetate					
Butoxy-	C ₆ H ₁₄ O ₂	171.15	-	170.8	-
glycol					
Isobutyl	C ₇ H ₁₄ O ₃	182.15	70	180.5	-
lactate					
1,3-Dichlor-	C ₃ H ₆ OCl ₂	175.8	70	173.0	-4.8
2-propanol					(70%)
1,2-Dichlor-	C ₃ H ₆ OCl ₂	182.5	57	177.2	-
3-propanol					

Iodobenzene (C₆H₅I) + Methyl malate (C₆H₁₀O₅)

Grossmann and Landau, 1910

gr/100cc		(α)					
		red	yellow	green	pale blue	dark blue	violet
20°							
50.082	-4.49	-4.99	-5.29	-5.99	-6.49	-6.89	
25.041	-2.88	-3.27	-3.47	-3.71	-3.99	-	
12.5205	-0.80	-1.04	-0.80	-0.64	-0.48	-	
4.815	-0.62	+0.62	+1.66	+3.53	+5.19	+6.65	
2.4075	+3.32	+5.40	+7.89	+9.97	+11.63	-	

Iodobenzene (C_6H_5I) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Mc Donald, 1908

t	d	t	d
0%		10.6375%	
19.5	1.83257	18.85	1.73208
24.8	1.82363	24.1	1.72429
31.25	1.8138	34.3	1.7090
38.5	1.8027	51.6	1.6832
24.9011%		49.8182%	
19.5	1.61552	18.3	1.45079
24.5	1.60846	24.15	1.44344
29.6	1.6011	35.75	1.4288
38.9	1.5881	53.2	1.4069
50.6	1.5716		
75.2983%			
19.25	1.31392	36.2	1.2948
25.05	1.30724	53.7	1.2749

%	d	(α) _D
20°		
0	1.83173	11.0
10.6375	1.73038	9.2
24.9011	1.61482	8.2
49.8182	1.44856	8.0
75.2983	1.3131	7.9
0	1.83174	11.0
4.96374	1.78225	-

t	(α) _D	t	(α) _D
10.6375%		24.9011%	
24.2	9.78	16.8	7.83
40.1	11.77	21.1	8.36
51.1	13.26	36.4	10.38
		52.4	12.29
49.8182%		75.2983%	
13.6	7.18	15.6	7.48
26.4	8.86	21.6	8.03
40.4	10.33	33.5	9.32
51.5	11.43	45.5	10.53
59.5	12.18		

o-Dichlorbenzene ($C_6H_4Cl_2$) (b.t. = 179.5) + Alcohol

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Heptyl alcohol	$C_7H_{16}O$	176.15	55	173.5	-
Octyl alcohol	$C_8H_{18}O$	180.4	46	177.5	-5.5 (60%)
Glycol	$C_2H_6O_2$	197.4	20	165.8	-
Glycol monoacetate	$C_4H_8O_3$	190.9	-	179.3	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	73	170.5	-
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	60	170.5	-
1,2-Dichlor-3-propanol	$C_3H_6OCl_2$	182.5	40	174.2	-
Ethanol amine	C_2H_7ON	170.8	40	157.3	-

p-Dichlorbenzene ($C_6H_4Cl_2$) + Ethyl alcohol (C_2H_6O)

G.L.Starobinets and K.S.Starobinets, 1951

mol%	f. t.	σ
55°		
0.00	52.74	32.00
2.50	51.62	-
5.00	50.58	-
7.50	50.02	-
10.00	49.61	30.25
20.00	48.14	28.85
30.00	47.38	27.50
40.00	46.28	25.95
50.00	45.32	24.90
60.00	43.80	23.90
70.00	41.16	23.25
80.00	35.64	22.10
90.00	23.18	20.80
100.00	-	19.65

mol%	d	ϵ
55°		
0.00	1.2530	2.397
5.14	1.2390	2.536
9.58	1.2250	2.688
20.14	1.1968	3.176
34.80	1.1495	4.191
50.17	1.0985	5.950
58.54	1.0508	7.755
69.92	0.9895	10.44
79.94	0.9317	12.86
89.96	0.8574	16.98
100.00	0.7668	19.66

p-dichlorbenzene ($C_6H_4Cl_2$) + Propyl alcohol
(C_3H_8O)

G.L.Starobinets and K.S.Starobinets, 1951

mol%	f. t.	σ
55°		
0.00	52.74	32.00
2.5	51.40	-
5.0	50.42	-
7.5	50.05	-
10.0	49.57	30.45
20.0	47.74	29.25
30.0	46.70	27.85
40.0	45.26	26.80
50.0	43.58	25.45
60.0	41.29	24.55
70.0	37.60	23.70
80.0	31.00	22.80
90.0	14.85	21.85
100.0	-	20.70

mol%	d	ϵ
55°		
0.00	1.2530	2.397
5.08	1.2375	2.522
10.03	1.2200	2.687
19.94	1.1841	3.100
30.16	1.1469	3.750
39.29	1.1139	4.450
49.06	1.0717	5.357
59.02	1.0219	6.821
68.66	0.9740	8.761
78.79	0.9208	11.058
88.10	0.8611	13.449
100.00	0.7791	16.774

p-Dichlorbenzene ($C_6H_4Cl_2$) + Isopropyl alcohol
(C_3H_8O)

G.L.Starobinets and K.S.Starobinets, 1951

mol%	f. t.	σ
55°		
0.0	52.74	32.00
2.5	51.52	-
5.0	50.50	-
7.5	49.97	-
10.0	49.30	29.40
20.0	47.30	29.50
30.0	45.85	26.00
40.0	44.54	24.60
50.0	42.92	23.40
60.0	40.70	22.30
70.0	37.48	21.40
80.0	31.34	20.50
90.0	16.26	19.75
100.0	-	19.05

mol%	d	ϵ
55°		
0.00	1.2530	2.397
5.09	1.2339	2.526
8.89	1.2179	2.630
20.29	1.1782	3.062
29.75	1.1379	3.605
40.00	1.1014	4.451
50.53	1.0574	5.600
59.95	1.0140	6.551
69.87	0.9585	7.707
79.86	0.8980	9.628
89.96	0.8296	11.756
100.00	0.7532	14.330

p-Dichlorbenzene ($C_6H_4Cl_2$) + Isobutyl alcohol
($C_4H_{10}O$)

G.L.Starobinets and K.S.Starobinets, 1951

mol%	f. t.	σ
55°		
0.00	52.74	32.00
5.00	50.46	-
10.00	48.80	29.25
20.00	47.02	27.50
30.00	45.46	26.10
40.00	43.96	24.65
50.00	41.90	23.85
60.00	39.40	22.80
70.00	34.13	22.50
80.00	27.25	21.95
90.00	11.98	21.00
100.00	-	20.20

mol%	d	e
55°		
0.00	1.2530	2.397
4.92	1.2278	2.505
10.22	1.2071	2.646
19.59	1.1696	2.999
29.83	1.1264	3.467
39.85	1.0778	4.130
49.67	1.0378	4.969
60.13	0.9878	6.130
69.90	0.9367	7.474
79.87	0.8853	9.384
89.86	0.8349	11.329
100.00	0.7726	13.177
<hr/>		
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p-Dichlorbenzene ($C_6H_4Cl_2$) + Isoamyl alcohol ($C_5H_{12}O$)		
G.L.Starobinets and K.S.Starobinets, 1951		
mol%	f.t.	σ
55°		
0.0	52.74	32.00
2.5	51.53	-
5.0	50.30	-
7.5	49.72	-
10.0	49.14	29.30
20.0	47.20	28.05
30.0	45.50	25.75
40.0	43.58	24.80
50.0	41.22	24.80
60.0	37.96	24.05
70.0	33.24	23.40
80.0	25.15	22.65
90.0	8.20	21.80
100.0	-	21.05
<hr/>		
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mol%	d	e
55°		
0.00	1.2530	2.397
4.99	1.2262	2.505
9.85	1.2042	2.623
30.04	1.1124	3.379
39.66	1.0689	3.933
49.55	1.0233	4.536
59.74	0.9773	5.462
69.71	0.9306	6.582
79.76	0.8836	7.916
89.89	0.8348	9.538
100.00	0.7862	11.231
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p-Dichlorbenzene ($C_6H_4Cl_2$) + Heptyl alcohol ($C_7H_{16}O$)		
G.L.Starobinets and K.S.Starobinets, 1951		
mol%	f.t.	σ
55°		
0.0	52.74	32.00
2.5	51.36	-
5.0	50.39	-
7.5	49.51	30.60
10.0	48.88	30.10
20.0	46.68	28.90
30.0	44.16	28.30
40.0	41.62	27.55
50.0	37.45	26.55
60.0	33.22	25.75
70.0	25.56	24.80
80.0	-	23.90
90.0	-	23.00
100.0	-	22.10

mol%	d		ε	
55°				
0.00	1.2530	2.397		
23.00	1.1280	3.006		
40.00	1.0459	3.574		
60.00	0.9586	4.722		
87.00	0.8435	7.031		
100.0	0.8023	8.223		

p-Dichlorobenzene(C ₆ H ₄ Cl ₂) + Octadecyl alcohol (C ₁₈ H ₃₈ O)				
G.L.Starobinets and K.S.Starobinets, 1951				
mol%	f. t.		σ	
55°				
0.0	52.74	32.00		
2.50	51.40	31.90		
5.00	50.32	31.50		
7.50	49.20	31.10		
10.00	48.30	30.95		
20.00	46.00	30.60		
30.00	42.20	30.40		
100.00	-	29.70 (58°)		

mol%	d		ε	
55°				
0.00	1.2530	2.397		
2.63	1.2229	2.460		
5.07	1.1975	2.514		
7.74	1.1714	2.560		
10.50	1.1455	2.618		
20.33	1.0744	2.776		
30.17	1.0167	2.911		
100.00	0.8246	3.475		

p-Dichlorobenzene (C ₆ H ₄ Cl ₂) + Methyl malate 1 (C ₆ H ₁₀ O ₅)						
Grossmann and Landau, 1910						
gr/100cc		(α)				
red	yellow	green	pale	dark	violet	
			blue	blue		
20°						
49.699	-2.21	-2.72	-2.92	-2.21	-1.91	-1.61
24.8495	-1.01	-0.56	-0.28	+0.52	+0.85	-
12.4248	+1.05	+2.17	+2.90	+3.86	+4.83	-
5.081	+1.97	+3.54	+5.12	+6.69	+8.27	+9.84
2.5405	+3.54	+6.30	+7.48	+9.84	+11.42	-

p-Dichlorobenzene (C ₆ H ₄ Cl ₂) + Ethyl tartrate (C ₈ H ₁₄ O ₆)				
Patterson and Mc Donald, 1908				
t	(α) _D	t	(α) _D	
5.002%		40.01%		
50.8	6.78	53.7	6.62	
55.6	7.44	60.0	7.4	
60.0	8.05	63.4	7.8	
63.6	8.53	72.4	8.82	
72	9.44	99.0	11.18	
79.3	10.23			
97.0	11.85			
60.01%				
52.7	7.77	66.0	9.37	
57.0	8.35	75.0	10.25	
60.00	8.7	89.7	11.5	

p-Dibromobenzene (C ₆ H ₄ Br ₂) + Ethyl alcohol (C ₂ H ₆ O)				
Schröder, 1893				
%		f. t.		
0.0	13.0			
5.6	20.0			
12.2	23.0			
19.5	25.0			
25.4	26.5			
42.5	30.0			
54.7	35.0			
66.5	42.5			
80.2	58.5			
95.4	69.0			

Mortimer, 1923				
mol%		f. t.		
97.2	20			
95.9	40			
89.0	60			
0.0	89.0			

p-Dibrombenzene ($C_6H_4Br_2$) (b.t. = 220.25) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Glycol	$C_2H_6O_2$	199.4	32.5	183.9	-
Glycerol	$C_3H_8O_3$	290.5	10	217.1	-
Geraniol	$C_{10}H_{18}O$	229.6	3	220.2	-
Borneol	$C_{10}H_{18}O$	215.0	80	214.9	-
Menthol	$C_{10}H_{20}O$	216.3	57	215.3	55 (57%)
Benzyl alcohol	C_7H_8O	205.25	65.5	204.25	48 (65.5%)
Phenyl ethanol	$C_8H_{10}O$	219.4	32.5	215.0	67 (32.5%)
Phenyl propanol	$C_9H_{12}O$	238.6	15	219.9	-
Propyl lactate	$C_6H_{12}O_3$	171.7	62	170.0	-
Diglycol	$C_6H_{10}O_3$	245.5	13	212.85	-

p-Dibrombenzene ($C_6H_4Br_2$) + Propyl alcohol
(C_3H_8O)

Schröder, 1893

%	f.t.
0	87.0
3.2	82.0
10.7	77.5
44.3	66.5
56.4	62.0
68.0	54.0

p-Dibrombenzene ($C_6H_4Br_2$) + Isobutyl alcohol
($C_4H_{10}O$)

Schröder, 1893

%	f.t.
0	87.0
5.4	80.0
24.3	74.0
46.5	66.0
63.5	56.0
71.3	49.5
84.7	30.5

p-Chlorbrombenzene (C_6H_4ClBr) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.
0	196.4
28	173.8 Az
100	197.4

p-Chlorbrombenzene (C_6H_4ClBr) + Benzyl alcohol
(C_7H_8O)

Lecat, 1949

%	b.t.
0	196.4
-	194.0 Az
100	205.25

Trichlorbenzenes. ($C_6H_3Cl_3$) (b.t. = 208.4) +
Alcohols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Glycol	$C_2H_6O_2$	197.4	-	181.0
Benzyl alcohol	C_7H_8O	205.25	-	202.5
Benzyl carbinol	$C_8H_{10}O$	219.4	-	207.5

o-Fluortoluene (C_7H_7F) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1919

gr/100cc		(α)				
red	yellow	green	pale blue	dark blue	violet	
20°						
49.915	-4.29	-5.15	-5.75	-6.74	-6.73	-6.59
24.9575	-2.88	-3.37	-3.85	-3.73	-3.65	-
12.4788	-1.68	-1.84	-1.68	-1.20	-0.88	-

p-Fluortoluene (C_7H_7F) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet blue
20°						
50.047	-3.60	-4.28	-4.78	-4.98	-5.12	-4.90
25.0235	-1.96	-2.28	-2.48	-2.24	-2.08	-
12.5118	-1.12	-0.72	-0.40	0.00	+0.24	-
5.346	+0.75	+1.50	+2.06	+3.18	+3.93	+5.05

o-Chlortoluene (C_7H_7Cl) (b.t. = 159.2) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	44	153.5	-2.5 (45%)
Glycol	$C_2H_6O_2$	197.4	13	152.5	-
Pinacol	$C_6H_{14}O_2$	174.35	-	157.0	-
Propoxy-glycol	$C_5H_{12}O_2$	151.35	60	149.5	+0.3 (50%)
Butoxy-glycol	$C_6H_{14}O_2$	171.15	12	158.5	+0.1 (15%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	65	151.0	-1.2 (65%)
Propyl lactate	$C_6H_{12}O_3$	171.7	-	159.0	-
Isopropyl lactate	$C_6H_{12}O_3$	166.8	22	157.8	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	85	128.0	-1.8 (70%)
Ethylene iodhydrin	C_2H_5OI	176.5	29	155.5	-
Cyclohexanol	$C_6H_{12}O$	160.8	37	155.2	-2.7 (50%)
Methyl cyclohexanol	$C_7H_{14}O$	168.5	-	158.4	-2.2 (20%)
Ethanolamine	C_2H_7ON	170.8	26	146.5	-
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	15	157.8	-2.5 (10%)

p-Chlortoluene (C_7H_7Cl) (b.t. = 162.4) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	54	154.0	-2.0 (60%)
Heptyl alcohol	$C_7H_{16}O$	176.15	8	161.9	-
Glycol	$C_2H_6O_2$	197.4	14	154.8	-
Pinacol	$C_6H_{14}O_2$	174.35	13	153.0	-
Propoxy-glycol	$C_5H_{12}O_2$	151.35	70	149.7	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	20	160.5	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	72	152.0	-0.8 (90%)
Propyl lactate	$C_6H_{12}O_3$	171.7	18	160.5	-
Isopropyl lactate	$C_6H_{12}O_3$	166.8	36	160.2	-
Cyclohexanol	$C_6H_{12}O$	160.8	45	156.5	-2.8 (50%)
Methyl cyclohexanol	$C_7H_{14}O$	168.5	30	161.1	-2.6 (25%)
Ethanolamine	C_2H_7ON	170.8	28	148.3	-
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	22	160.0	-

Bromotoluene (C_7H_7Br) + Isopropyl Alcohol
(C_3H_8O)

Roy, 1956

Absorption spectrum of 40 % at room temperature .

o-Bromotoluene (C_7H_7Br) (b.t. = 181.5) + Alcohols						p-Bromotoluene (C_7H_7Br) + Ethyl alcohol (C_2H_6O)			
Lecat, 1949						Paterno, 1895			
		2nd Comp.		Az					
Name	Formula	b.t.	%	b.t.	Dt mix	%		f.t.	
Propyl lactate	$C_6H_{12}O_3$	171.7	15	171.0	-	0		26.88	
Isobutyl lactate	$C_7H_{14}O_3$	182.15	50	179.0	-	0.26		26.45	
Heptyl alcohol	$C_7H_{16}O$	176.15	67	174.0	-3.5 (30%)	0.59		26.03	
Octyl alcohol	$C_8H_{18}O$	195.2	-	181.45	-2.1 (33%)	1.07		25.57	
sec. Octyl alcohol	$C_8H_{18}O$	180.4	49	178.3	-2.4 (50%)	1.86		25.11	
Glycol	$C_2H_6O_2$	197.4	24	166.8	-	3.49		24.48	
Glycolmonoacetate	$C_4H_8O_3$	190.9	25	180.0	-	5.52		23.62	
Butoxyglycol	$C_6H_{14}O_2$	171.15	65	169.6	+0.6 (65%)	9.84		23.00	
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	60	170.8	-5.2 (60%)	16.06		21.02	
1,2-Dichlor-3-propanol	$C_3H_6OCl_2$	182.5	45	174.5	-4.3 (45%)	28.86		20.09	
Ethenolamine	C_2H_7ON	170.8	42	157.8	-				
m-Bromotoluene (C_7H_7Br) (b.t. = 184.3) + Alcohols						p-Bromotoluene (C_7H_7Br) + tert. Butyl alcohol ($C_4H_{10}O$)			
Lecat, 1949						Paterno and Ampola, 1897			
		2nd Comp.		Az					
Name	Formula	b.t.	%	b.t.	Dt mix	%		f.t.	
Octyl alcohol	$C_8H_{18}O$	195.2	9	184.05	-1.3 (15%)	100.0	23.52	62.41	8.89
Sec. Octyl alcohol	$C_8H_{18}O$	180.4	57	178.9	-2.2 (60%)	98.99	22.96	61.15	8.76
Glycol	$C_2H_6O_2$	197.4	23	168.3	-	96.05	22.28	59.90	9.21
Benzyl alcohol	C_7H_8O	205.25	-	184.15	-2.3 (20%)	94.45	21.42	59.19	10.17
Ethanolamine	C_2H_7ON	170.8	44	159.3	-	91.43	19.94	53.30	11.54
Isobutyl lactate	$C_7H_{14}O_3$	182.15	60	180.0	-	87.97	18.30	48.43	13.01
Glycolmonoacetate	$C_4H_8O_3$	190.9	32	182.0	-	79.40	14.32	45.89	13.78
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	64	171.8	-5.0 (50%)	73.13	12.17	42.00	14.73
1,2-Dichlor-3-propanol	$C_3H_6OCl_2$	182.5	50	175.8	-5 (40%)	69.09	10.45	0.0	26.74
						64.80	9.18		
p-Bromotoluene (C_7H_7Br) (b.t. = 185.0) + Alcohols						Lecat, 1949			
		2nd Comp.		Az					
Name	Formula	b.t.	%	b.t.	Dt mix				
Octyl alcohol	$C_8H_{18}O$	195.2	10	184.6					
Glycol	$C_2H_6O_2$	197.4	25	168.7					
Benzyl alcohol	C_7H_8O	205.25	10	184.8					
Isobutyl lactate	$C_7H_{14}O_3$	182.15	62	180.2					
1,3-Dichlor-2-propanol	$C_3H_6OCl_2$	175.8	67	172.0					
1,2-Dichlor-3-propanol	$C_3H_6OCl_2$	182.5	52	176.2					

Bromotoluene (C ₇ H ₇ Br) + Isobutyl alcohol (C ₄ H ₁₀ O)					
Roy, 1956					
Absorption spectrum of 60% solution at ordinary temperature and -180°.					
p-Iodotoluene (C ₇ H ₇ I) (b.t. = 197.4) + Alcohols					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	
Glycol	C ₂ H ₆ O ₂	197.4	30	181.5	
Benzyl alcohol	C ₇ H ₈ O	205.25	65	203.0	
Menthol	C ₁₀ H ₂₀ O	216.3	-	213.0	
Benzyl chloride (C ₇ H ₇ Cl) (b.t. = 179.3) +					
Lecat, 1949 Alcohols					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat. t.
Heptyl alcohol	C ₇ H ₁₆ O	176.15	49	173.5	-6.0 (50%)
sec. Octyl alcohol	C ₈ H ₁₈ O	180.4	46	177.5	-5.5 (60%)
Glycol	C ₂ H ₆ O ₂	197.4	24	166.7	150 (24%)
Methyl cyclohexanol	C ₇ H ₁₄ O	168.5	66	168.2	-
Propyl lactate	C ₆ H ₁₂ O ₃	171.7	22	171.2	-2.0 (50%)
Isobutyl lactate	C ₇ H ₁₄ O ₃	182.15	70	178.0	-1.8 (39%)
Cyclohexanol	C ₆ H ₁₂ O	168.5			

Benzyl chloride (C ₇ H ₇ Cl) + Methyl malate 1 (C ₆ H ₁₀ O ₅)						
Grossmann and Landau, 1910						
gr/100cc		(α)				
	red	yellow	green	pale blue	dark blue	violet
20°						
50.133	-2.85	-3.13	-3.35	-3.81	+4.77	-4.59
25.0665	-1.95	-2.03	-1.72	-1.48	-1.32	-
12.5333	+0.32	+0.56	+1.04	+1.44	+1.91	-
4.847	+0.83	+1.65	+2.89	+3.92	+4.95	+6.19
2.4235	+1.24	+2.48	+4.54	+6.19	+7.43	-
Benzyl bromide (C ₇ H ₇ Br) + Octyl alcohol (C ₈ H ₁₈ O)						
Lecat, 1949						
	%		b.t.			Dt mix
	0		198.5			
	30					-6.5
	32		193.5	Az		
	100		195.2			
Benzyl bromide (C ₇ H ₇ Br) + Isobutyl lactate (C ₈ H ₁₆ O ₃)						
Lecat, 1949						
	%		b.t.			Dt mix
	0		198.5			
	10		-			-0.6
	73		197.6			
	100		202.4			
Benzylidene chloride (C ₇ H ₆ Cl ₂) (b.t. = 205.2) +						
Lecat, 1949 Alcohols						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.		Dt mix
Octyl alcohol	C ₈ H ₁₈ O	195.2	82	195.0		-
Borneol	C ₁₀ H ₁₈ O	215.0	15	205.0		-
Isoamyl lactate	C ₈ H ₁₆ O ₃	202.4	25	201.5		+1.2 (52%)

Benzylidene chloride ($C_7H_6Cl_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
50.625	-1.54	-2.23	-2.47	-2.69	-2.90	-2.55
25.3125	-1.46	-1.22	-0.91	-0.55	-0.20	-
12.6563	+0.47	+0.63	+1.19	+1.90	+2.37	-
5.035	+0.99	+1.99	+2.98	+3.97	+4.97	+6.36
2.5171	+1.59	+3.19	+5.16	+7.15	+8.74	-

p-Fluorxylene (C_8H_9F) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

gr/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
50.003	-4.00	-4.80	-5.40	-5.90	-6.06	-5.86
25.0015	-2.64	-3.08	-3.40	-3.40	-3.24	-
12.5008	-1.44	-1.60	-1.44	-0.96	-0.64	-

Ioddiphenyl ($C_{12}H_9I$) + Menthol ($C_{10}H_{20}O$)

Pfeiffer, Schmitz and Inone, 1929

%	f. t.	E	%	f. t.	E
0	43	40	50	87	33
5	41.5	38	60	91	"
10	55	"	78	96	"
20	68	"	80	101	"
30	76	"	90	104.5	"
40	80.5	"	100	112	111

1-Chloronaphthalene ($C_{10}H_7Cl$) (b. t. = 262.7) +
Alcohols
Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b. t.	%	b. t.	
Glycol	$C_2H_6O_2$	197.4	65.2	193.1	
Glycerol	$C_3H_8O_3$	290.5	17	256.0	
Benzyl glycol	$C_{12}H_{12}O_2$	265.2	-	261.5	
Diglycol	$C_4H_{10}O_3$	245.5	47	234.1	
Triglycol	$C_6H_{14}O_3$	288.7	5	261.5	

1-Bromnaphthalene ($C_{10}H_7Br$) (b. t. = 281.2) +
Alcohols
Lecat, 1949

Name	Formula	2nd Comp.		Az	
		b. t.	%	b. t.	
Glycol	$C_2H_6O_2$	197.4	71.2	194.95	
Glycerol	$C_3H_8O_3$	290.5	-	272.5	
Diglycol	$C_4H_{10}O_3$	245.5	59.5	240.8	
Triglycol	$C_6H_{14}O_3$	288.7	33	273.4	

1-Bromnaphthalene ($C_{10}H_7Br$) + Methyl malate 1
($C_6H_{10}O_5$)

Walden, 1906

gr/100cc	red		green		violet	
	(α) d. c.		(α) d. c.		(α) d. c.	
18°						
27.2	-2.90	1	-5.57	1.4	-6.47	1.65
6.8	+0.2	1	+1.2	5.3	+3.0	13.7
1.7	+3.3	1	+7.4	2.3	+15.9	4.9

d. c. = dispersion coefficient.

1-Bromnaphthalene ($C_{10}H_7Br$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Mc Donald, 1908

t	d	t	d
0%		2.07933%	
18.55	1.49225	19.8	1.47853
20.75	1.49006	22.8	1.47549
23.0	1.48777	31.3	1.46697
4.99697%		20.2601%	
18.95	1.47269	18.65	1.42089
20.95	1.47067	20.75	1.41853
24.3	1.46727	24.25	1.41491
49.6882%			
18.7	1.33226	23.6	1.3270
20.55	1.33026		
23.6	1.3270		
%	d	(α) _D	
20°			
0	1.48651	26.0	
2.07933	1.47833	20.9	
0	1.49081	26.0	
4.99697	1.47164	16.6	
20.2601	1.41937	-	
20.37	-	11.4	
49.6882	1.33085	9.32	
t	(α) _D	t	(α) _D
2.07933%		4.99697%	
16.9	20.36	15.0	15.3
25.2	21.83	33.5	19.9
38.5	24.34	47.2	22.3
52.1	24.51	59.3	24.1
79.0	29.2		
110.5	29.05	49.6882%	
20.37%		13.5	8.31
		20.0	9.32
19.4	11.8	31.0	11.04
24.3	12.22	42.5	12.51
		52.1	13.62

(1 + 2) Bromnaphthalene ($C_{10}H_7Br$) + Methyl
alcohol (CH_3O)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T.	limits of pressure	dt/dp
62.0	5 - 195Kg	-0.025

(1 + 2) Bromnaphthalene ($C_{10}H_7Br$) + Isobutyl
alcohol ($C_4H_{10}O$)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T.	limits of pressure	dt/dp
8.6	1 - 180Kg	-0.01

Bromnaphthalene ($C_{10}H_7Br$) + Ethyl alcohol
(C_2H_6O)

Zecchini, 1897

%	d	n_D
7°		
0	1.49181	1.66356
52.04	1.03940	1.46738
100	0.80301	1.36699

XXVI. HALOGEN DERIVATIVES + PHENOLS AND ACIDS .

Methylene iodide (CH_2I_2) + Resorcinol ($\text{C}_6\text{H}_6\text{O}_2$)

Bingham, 1907

C.S.T. = 180

Chloroform (CHCl_3) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Weissenberger, Schuster and Henke, 1925

mol%	p
20°	
66.7	40.2
50	74.6
40	93.6
33.3	105.2
0	160.5

Weissenberger, Schuster and Schüler, 1924

mol%	p
15°	
64.5	57
56.5	67
50	73
42.9	77
39.2	80
33.3	87

mol%	η
(water = 1)	

15°	
64.5	3.10
56.5	1.32
50.0	1.94
39.2	1.41
33.0	1.17
24.8	0.96

mol%	σ
(water = 1)	

15°	
64.5	0.347
56.5	0.328
50.0	0.311
39.2	0.287
33.0	0.278
28.6	0.270
25.0	0.263

Timofeev, 1905

%		Q mix
initial	final	(by mole phenol)
0	0.26	-3.74
0.26	0.73	-3.91
4.32	4.76	-2.99
14.25	14.70	-2.30
15.0	15.90	-2.44

Chloroform (CHCl_3) + o-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	56.6
50	83.0
40	93.0
33.3	100
28.6	104
25	108
22.2	110

mol%	η	σ
(water = 1)		

15°		
66.7	0.5	0.488
50.0	1.0	0.465
40.0	1.5	0.449
33.3	2.0	0.445
28.6	2.5	0.449
25.0	3.0	0.457
22.2	3.5	0.439

Chloroform (CHCl_3) + m-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	60.1
50	87.4
40	100
33.3	109
28.6	113
25	116
22.2	118

mol%	η	σ
(water = 1)		
15°		
66.7	4.77	0.428
50.0	2.91	0.430
40.0	1.55	0.432
33.3	1.37	0.435
28.6	1.10	0.440
25.0	0.92	0.448
22.2	0.87	0.452

Chloroform (CHCl_3) + p-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	59.9
50	83.2
40	91.8
33.3	98.8
28.6	103
25	106
22.2	108

mol%	η	σ
(water = 1)		
15°		
66.7	4.11	0.485
50.0	2.26	0.462
40.0	1.60	0.446
33.3	1.15	0.441
28.6	0.85	0.436
25.0	0.71	0.434
22.2	0.63	0.434

Chloroform (CHCl_3) + Resorcinol ($\text{C}_6\text{H}_6\text{O}_2$)

Walter, Collett and Lazzell, 1931

mol%	f.t.	sat.t.
100.00	109.4	-
85.19	102.3	-
5.68	-	90.0
5.15	-	89.4
0.521	-	25.0

Triple point = 94.8° ($\text{L}_1 + \text{L}_2 + \text{C}$)Chloroform (CHCl_3) + Pyrocatechol ($\text{C}_6\text{H}_6\text{O}_2$)

Walter, Colett and Lazzell, 1931

mol%	f.t.	mol%	f.t.
100.00	104.5	35.93	79.0
85.29	98.0	21.37	73.7
71.98	92.0	10.69	65.8
59.12	86.6	5.49	55.3
46.21	82.3	2.322	25.0

Bromoform (CHBr_3) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Paterno, 1896

%	D f.t.
0.81	-0.20
2.44	0.65
5.60	1.57
10.64	3.08
16.49	5.03
24.55	7.90

Carbon tetrachloride (CCl_4) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Weissenberger, Schuster and Schüler, 1924

mol%	p
15°	
57.5	55
49.5	61
40.0	65
33.9	67
28.7	67
25.0	68

Brusset and Bono, 1956 ; and Bono 1956.

mol%	p	mol%	p
20°			
0	91.0	20.0	86.3
2.5	90.5	25.0	85.4
5.0	89.9	30.0	84.4
10.0	88.7	35.0	83.0
15.0	87.6	40.0	80.8

Weissenberger, Schuster and Schüler, 1924

mol%	η	σ
(water = 1)		
15°		
57.5	3.65	0.300
49.5	2.91	0.284
40.0	2.24	0.271
33.9	1.99	0.264
28.7	1.69	0.257
25.1	1.56	0.250

Schupp, 1949

Total polarization for 10 - 60°

Hoffmann, 1943

molarity	molar extinction coefficient (9600 Å)
21.5	
4.017	0.00768
2.005	0.01337
0.9678	0.2328
0.5296	0.03514
0.2572	0.05406
0.1019	0.07922
0.0502	0.08945
0.0160	0.09800
0.0	0.1030

Mecke and Zeininger, 1948 (fig.)

mol%	κ
14°	
10	0.000000056
25	0.000001
50	0.000032
75	0.0010
100	0.0018

mol%	d κ /dt. 1/ κ
2	0.01
10	0.009
11	0.011
16	0.0051
23	0.005
25	0.004
35	-0.001
40	-0.0025
52	-0.003
55	-0.0007
60	-
72	+0.004
82	+0.0055
100	+0.0052

Carbon tetrachloride (CCl_4) + o-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Brusset and Bono 1956 and Bono 1956.

mol%	p	mol%	p
20°			
0	91.0	25.0	81.5
5.0	88.7	30.0	79.1
10.0	87.4	35.0	77.0
15.0	85.6	40.0	74.3
20.0	83.9		

Carbon tetrachloride (CCl_4) + m-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Brusset and Bono, 1956 and Bono 1956.

mol%	p	mol%	p
20°			
0	91.0	46.8	74.3
11.3	86.7	59.0	69.8
17.6	84.1	67.9	57.1
31.6	81.9	78.2	48.7

Carbon tetrachloride (CCl_4) + p-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Brusset and Bono, 1956 and Bono 1956.

mol%	p	mol%	p
20°			
0	91.0	28.1	81.7
12.2	86.0	43.9	72.0
16.8	84.3		

Carbon tetrachloride (CCl_4) + 1,2,3-Xylenol
($\text{C}_8\text{H}_{10}\text{O}$)

Bono, 1956

%	p	%	p
20°			
0	91.0	5.1	87.5
2.8	89.0	11.4	86.9

Carbon tetrachloride (CCl_4) + 1,2,4-Xylenol
($\text{C}_8\text{H}_{10}\text{O}$)

Bono, 1956

%	p	%	p
20°			
0	91.0	44.3	68.0
5.8	88.1	54.1	64.0
13.38	84.5	60.4	56.4
22.4	80.6	65.8	52.6
27.29	77.8	78.4	43.9
31.37	76.8	87.7	25.0
39.05	71.8		

Carbon tetrachloride (CCl_4) + 1,2,6-Xylenol
($\text{C}_8\text{H}_{10}\text{O}$)

Bono, 1956

%	p	%	p
20°			
0	91.0	31.8	73.5
4.0	88.0	40.0	68.3
12.0	83.5	49.3	63.2
22.0	77.3		

Carbon tetrachloride (CCl_4) + Pyrocatechol
($\text{C}_6\text{H}_6\text{O}_2$)

Walter, Collett and Lazzell, 1931

mol%	f.t.	mol%	f.t.
100.00	104.5	36.36	91.1
85.97	98.3	19.45	90.5
72.31	94.6	10.47	88.5
59.08	92.6	4.35	83.5
45.74	91.5	0.156	25.0

Carbon tetrachloride (CCl_4) + Resorcinol
($\text{C}_6\text{H}_6\text{O}_2$)

Walter, Collett and Lazzell, 1931

mol%	f.t.
100.00	109.4
85.31	104.1
0.84	100.7
0.65	95.4
0.231	25.0

Triple point = 103.7° ($\text{L}_1 + \text{L}_2 + \text{C}$)

Bingham, 1907

C.S.T. = 135

Carbon tetrachloride (CCl_4) + Hydroquinone
($\text{C}_6\text{H}_6\text{O}_2$)

Walter, Collett and Lazzell, 1931

mol%	f.t.
100.00	172.9
86.73	167.2
1.89	154.0
1.42	147.3
0.85	137.3
0.69	132.4
0.0081	25.0

Triple point = 163.2° ($L_1 + L_2 + C$)Carbon tetrachloride (CCl_4) + Thymol ($\text{C}_{10}\text{H}_{14}\text{O}$)

Carroll, Rollefson and Mathews, 1925

%	f.t.
24.2	0
49.1	25.0
79	38.5

Ethylene Bromide ($\text{C}_2\text{H}_4\text{Br}_2$) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Paterno and Ampola, 1897

%	f.t.	E
100	40.24	-
47.59	15.73	-
44.88	14.33	-
42.58	12.96	-
40.22	11.30	-
38.14	9.89	-
36.35	8.58	-
34.26	7.27	-
32.14	5.63	-
30.30	4.43	-
28.98	3.52	-
26.46	2.45	-
24.87	+1.21	-
22.18	-1.19	-
21.50	-1.32	-0.71
20.99	-1.12	-0.71
20.46	-0.96	-0.75
19.73	-0.63	-0.75
18.69	-0.24	-0.77
17.20	0.26	-0.81
16.04	0.76	-
14.86	1.22	-
14.27	1.46	-
13.86	1.58	-
0.0	10.00	-

Dahms, 1905

mol%	f.t.	mol%	f.t.
100	39.54	37.90	-1.1
99.490	39.13	37.0	-1.70
96.73	37.12	36.17	-1.51
93.59	34.99	31.85	-0.40
84.37	28.45	27.27	+0.72
76.88	23.29	19.93	2.60
72.90	20.50	10.21	5.28
66.72	16.64	4.325	7.41
61.29	13.3	1.639	8.71
56.47	10.3	0	9.625
44.72	3.25		

Ethylene Bromide ($\text{C}_2\text{H}_4\text{Br}_2$) + o-Nitrophenol
($\text{C}_6\text{H}_5\text{O}_3\text{N}$)

Sidgwick, Spurrell and Davies, 1915

%	f.t.
40.0	15
47.8	20
56.8	25
67.2	30
79.0	35
90.6	40
100	44.9

Ethylene bromide ($\text{C}_2\text{H}_4\text{Br}_2$) + p-Nitrophenol
($\text{C}_6\text{H}_5\text{O}_3\text{N}$)

Sidgwick, Spurrell and Davies, 1915

%	f.t.
31.0	70
52.0	80
73.2	90
88.5	100
98.0	110
100	113.8

Pentachlorethane (C_2HCl_5) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Lecat, 1949

%	b.t.
0	162.0
9.5	160.95 Az
100	182.2

Perchlorethane (C_2Cl_6) (b.t. = 184.8) + Phenols
Lecat, 1949

Name	2nd Comp. Formula	Az			
		b.t.	%	b.t.	Sat.t.
Phenol	C_6H_6O	182.2	38	173.7	124 (38%)
o-Cresol	C_7H_8O	191.1	27	181.3	122 (27%)
m-Cresol	C_7H_8O	202.2	8	183.2	-
p-Cresol	C_7H_8O	201.7	10	183.0	-

Bornyl chloride ($C_{10}H_{17}Cl$) + p-Cresol (C_7H_8O)

Lecat, 1949

%	b.t.	Az
0	207.5	
50	199.5	
100	201.7	

Bornyl chloride ($C_{10}H_{17}Cl$) + p-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b.t.	Az
0	207.5	
8	206.2	
100	219.75	

Chlorbenzene (C_6H_5Cl) + Phenol (C_6H_6O)

Gutner, Morozova and al., 1946

p	b.t.	% (V)
13%		
784.6	135.5	4.67
760.5	136.6	4.67
496	118.6	3.36
401	112.5	4.09
203	90.5	2.98
113	74.2	2.28
65	56.8	1.61
26	29.6	1.20
35%		
789	140.0	7.67
505	122.5	6.39
401	114.8	6.29
213	94.8	4.90
112	76.4	3.50
49	55.8	2.44
28	42.6	2.20
50.0%		
795	143.0	10.67
507	126.3	9.47
403	118.0	9.70
225	99.4	7.82
131	84.0	5.64
53	59.8	5.43
30	45.5	2.83
63%		
783	148.0	16.75
515	130.8	13.59
415	123.8	12.96
208	100.2	9.53
106	80.8	8.11
61	62.6	4.97
21	42.0	2.92
83%		
785	160.6	32.34
506	142.0	25.44
402	134.2	37.55
202	113.4	25.86
98	93.1	21.68
61	35.2	17.86
28	51.1	10.31
93%		
769.6	170.2	55.15
510	154.2	51.15
392	144.4	49.23
213	125.6	50.70
112	107.0	44.19
53	88.0	34.2
20	64.6	25.29
95%		
762.3	172.2	66.39
505	157.2	62.93
403	149.2	62.33
199	126.8	54.40
97	107.0	50.03
49	88.6	41.60
15	62.2	43.8

Hirobe, 1908

%	f.t.	%	f.t.
100	40.24	68.06	21.76
96.762	38.46	62.30	18.89
90.409	30.69	56.01	14.88
83.840	30.87	49.24	11.09
78.10	27.54	41.01	6.12

Bramley, 1916

%	d	n
20°		
100.00	1.0752	11040
81.45	1.0806	5555
71.41	1.0836	4070
58.15	1.0874	2748
49.90	1.0898	2218
38.90	1.0930	1673
30.43	1.0954	1374
21.73	1.0980	1122
9.78	1.1018	888
4.93	1.1034	825
0.00	1.1051	768

Mecke and Zeininger, 1948 (fig.)

mol%	n
14°	
10	0.000018
25	0.00008
50	0.00032
75	0.0016
100	0.0018

Taboury and Lestrade, 1947

Raman spectra in liquid phase

Chlorbenzene (C₆H₅Cl) + Resorcinol (C₆H₆O₂)

Bingham, 1907

C.S.T. = 227°

Brombenzene (C₆H₅Br) + o-Nitrophenol (C₆H₅O₃N)

Sidgwick, Spurrell and Davies, 1915

%	f.t.
48.8	20
57.7	25
67.2	30
78.3	35
89.7	40
100	44.9

Brombenzene (C₆H₅Br) + p-Nitrophenol (C₆H₅O₃N)

Sidgwick, Spurrell and Davies, 1915

%	f.t.
32.7	80
59.7	90
80.6	100
96.3	110
100	113.8

Iodobenzene (C₆H₅I) (b.t. = 188.45) + Phenols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Phenol	C ₆ H ₆ O	182.2	47	177.7	7 (47%)
o-Cresol	C ₇ H ₈ O	191.1	31	184.95	-4.4 (50%)
p-Cresol	C ₇ H ₈ O	201.7	12	187.9	-
o-Chlor-phenol	C ₆ H ₅ OCl	176.8	78	176.0	-

o-Dichlorbenzene (C₆H₄Cl₂) (b.t. = 179.5) + Phenols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Phenol	C ₆ H ₆ O	182.2	35	173.7	-
o-Cresol	C ₇ H ₈ O	191.1	15	179.1	-
o-Chlor-phenol	C ₆ H ₅ OCl	176.8	48	173.6	-5.0 (50%)

p-Dichlorobenzene ($C_6H_4Cl_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.	Sat. t.
0	174.4	
25.2	171.05 Az	42.4
100	182.2	

Taboury and Lestrade, 1947 (fig.)

%	f. t.	%	f. t.
0	58	60	30
10	54	70	24 E
20	50	80	30
30	46	96	36
40	40	100	41
50	36		

p-Dichlorobenzene ($C_6H_4Cl_2$) + o-Cresol (C_7H_8O)

Glass and Madgin, 1934 (fig.)

%	f. t.	%	f. t.
0	52.9	60	22.5
10	48	66.5	17.7 E
20	44	70	19.5
30	39	80	24
40	35	90	27.5
50	29.5	100	30.5

p-Dichlorobenzene ($C_6H_4Cl_2$) + o-Chlorophenol
(C_6H_5OCl)

Lecat, 1949

%	b. t.
0	174.4
35	171.0 Az
100	176.8

p-Dichlorobenzene ($C_6H_4Cl_2$) + p-Chlorophenol
(C_6H_5OCl)

Burnham and Madgin, 1936 (fig.)

mol%	f. t.
100	52.9
90	50.5
80	48
70	45
60	42
50	38.5
40	33.5
30	29
26.6	27.2 E
20	32.5
10	39
0	42.9

mol%	n_D
	54°
0	1.5317
20	1.5330
40	1.5405
60	1.5448
80	1.5490
100	1.5538

p-Dichlorobenzene ($C_6H_4Cl_2$) + Thiophenol
(C_6H_6S)

Lecat, 1949

%	b. t.
0	174.4
71	168.2 Az
100	169.5

p-Dichlorobenzene ($C_6H_4Cl_2$) + o-Nitrophenol
($C_6H_5O_3N$)

Sorum and Durand, 1952

%	f. t.
0	53.0
-	23.1 E
100	45.0

p-Chlorbrombenz-(C_6H_4ClBr) (b.t. = 196.4) + Phenols
zene

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	C_6H_6O	182.2	62	181.0
o-Cresol	C_7H_8O	191.1	53	189.0
p-Cresol	C_7H_8O	201.7	25	194.5

p-Dibrombenzene ($C_6H_4Br_2$) + Phenol (C_6H_6O)

Mortimer, 1923

mol%	f.t.
98.3	40
71.4	60
28.0	30
0.0	89.0

Shishokin and Muskina, 1938

mol%	f.t.
0	87
9.81	82.4
21.81	78.5
30.41	76.1
40.12	73.2
50.0	70
60.08	66
69.25	60.9
79.25	51.4
90.0	34.9

p-Dibrombenzene ($C_6H_4Br_2$) (b.t.=220.25) + Phenols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
o-Xylenol	$C_8H_{10}O$	226.8	25	218.65	-
m-Xylenol	$C_8H_{10}O$	210.5	90	209.8	-
Pyro- catechol	$C_6H_6O_2$	245.9	10	218.15	84 (10%)
Guethol	$C_8H_{10}O_2$	216.5	32	214.0	-
Methyl salicylate	$C_8H_{10}O_3$	222.95	25	219.4	69
p-Chlor- phenol	C_6H_5OCl	219.75	35	215.05	66.5
o-Nitro- phenol	$C_6H_5O_2N$	217.2	52	215.15	46

Hexachlorbenzene (C_6Cl_6) + Pentachlorphenol
(C_6HOC1_5)

Brandstätter, 1948

%	f.t.
100	190
80	198
60	205
50	209
40	213
20	220
0	227

o-Chlortoluene (C_7H_7Cl) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	159.2
3	159.0
100	182.2 Az

p-Chlortoluene (C_7H_7Cl) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	162.4
10	161.7
100	182.2 Az

p-Chlortoluene (C_7H_7Cl) + Thiophenol (C_6H_6S)

Lecat, 1949

%	b.t.
0	162.4
9	161.5
100	169.5 Az

o-Bromtoluene (C_7H_7Br) (b.t. = 181.5) + Phenols
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	C_6H_6O	182.2	40	174.35
o-Cresol	C_7H_8O	191.1	18	180.5
o-Chlor-phenol	C_6H_5OCl	176.8	52	153.8

m-Bromtoluene (C_7H_7Br) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.	
0	184.3	Az
43	175.7	
100	182.2	

m-Bromtoluene (C_7H_7Br) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b.t.	
0	184.3	Az
22	183.05	
100	191.1	

p-Bromtoluene (C_7H_7Br) + Phenol (C_6H_6O)

Paterno, 1895

%	f.t.	%	f.t.
0	26.88	14.17	21.03
2.13	25.36	16.67	20.37
3.75	24.48	18.43	19.85
5.49	23.77	21.09	19.07
7.32	23.18	23.51	18.57
8.58	22.70	26.11	17.83
10.40	22.13	28.57	17.24
12.20	21.57	30.01	16.81

Paterno, 1896

%	f.t.
100	40.06
98.04	39.34
94.20	37.68
85.29	36.36
80.33	34.06
78.32	30.88
72.03	28.77
64.46	27.44

Paterno and Ampola, 1897

%	f.t.	E	%	f.t.	E
100.0	40.06	-	0.0	26.74	-
99.44	39.96	-	1.33	26.12	-
98.04	39.34	-	2.13	25.22	-
94.19	37.68	-	3.76	24.34	-
91.00	36.36	-	5.49	23.63	-
85.28	34.06	-	7.32	23.04	-
81.51	32.48	-	8.58	22.56	-
78.32	30.75	-	10.41	21.99	-
72.02	28.51	-	12.20	21.43	-
65.10	27.18	-	14.21	20.89	-
64.72	25.26	-	16.73	20.23	-
59.32	23.18	-	18.42	19.71	-
55.34	21.33	-	21.75	18.93	-
52.57	20.17	-	23.50	18.43	-
51.49	19.51	-	26.42	17.69	-
50.67	19.25	-	28.58	17.10	13.49
49.62	18.63	14.05	30.04	16.67	-
49.02	18.17	-	32.22	15.99	-
48.06	18.71	14.05	34.44	15.35	13.65
46.84	17.23	-	37.19	14.42	13.65
45.58	16.65	14.11	38.00	14.14	13.61
44.82	14.69	-	38.57	14.03	-
43.50	14.71	14.06	39.54	13.73	13.62
42.05	14.83	14.11	40.33	13.59	-
37.80	14.25	14.05	40.91	13.27	13.65
			41.78	13.51	-
			42.76	13.41	-
			44.32	13.97	13.41
			46.38	15.07	-
			100.00	40.06	-

p-Bromtoluene (C_7H_7Br) (b.t. = 185.0) + phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	C_6H_6O	182.2	44	176.2
o-Cresol	C_7H_8O	191.1	25	183.0
o-Chlor-phenol	C_6H_5OCl	176.8	64	175.5
o-Bromphenol	C_6H_4OBr	195.0	20	183.8

p-Bromtoluene (C_7H_7Br) + p-Cresol (C_7H_8O)

Paterno, 1895

%	f.t.	%	f.t.
0	26.88	8.28	23.46
0.41	26.58	11.49	22.54
1.02	26.20	15.07	21.60
1.76	25.83	18.87	20.56
2.65	25.39	22.55	19.59
3.83	24.93	28.04	17.91
5.45	24.34		

p-Bromtoluene (C_7H_7Br) + Thymol ($C_{10}H_{14}O$)

Paterno and Ampola, 1897

%	f.t.	%	f.t.
0	26.74	35.52	11.35
0.37	26.53	37.89	13.63
0.86	26.27	39.43	15.39
1.87	25.72	68.04	33.12
3.29	24.97	68.70	35.64
4.93	24.18	77.13	38.58
7.00	23.22	82.65	40.92
9.04	22.35	87.39	43.02
11.55	21.25	91.69	45.20
27.06	15.01	94.57	46.46
29.04	14.11	96.97	47.26
31.31	13.08	98.13	48.36
33.37	12.25	100	49.20

E = 13.57°

Lecat, 1949

p-Iodtoluene (C_7H_7I) (b.t. = 214.5) + Phenols

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
m-Cresol	C_7H_8O	202.2	65	201.6
p-Cresol	C_7H_8O	201.7	70	201.0
o-Xylenol	$C_8H_{10}O$	226.8	15	214.0
m-Xylenol	$C_8H_{10}O$	210.5	62	207.5
p-Ethyl-phenol	$C_8H_{10}O$	218.8	28	212.0
Pyrocatechol	$C_6H_6O_2$	245.9	6	213.2
p-Chlor-phenol	C_6H_5OCl	219.75	22	212.0
o-Nitro-phenol	$C_6H_5O_2N$	217.2	18	212.0

Phenyl chloroform ($C_7H_5Cl_3$) + Methyl salicylate ($C_8H_8O_3$)

Lecat, 1949

%	b.t.	Dt mix.
0	220.8	
3	220.75	Az
93	-	0
100	222.95	

Pentachlortoluene ($C_7H_3Cl_5$) + Pentachlorphenol (C_6HCl_5)

Brandstätter, 1948

%	f.t.
100	190
80	196
60	202
50	205
40	207
20	214
0	219

Ioddiphenyl ($C_{12}H_9I$) + 1-Naphthol ($C_{10}H_8O$)

Pfeiffer, Schmitz and Inoue, 1929

%	f.t.	E
100	96	94
90	92.5	73
80	89	73
70	86	73
60	82.5	73
50	78	73
40	75.5	73
30	84	73
20	93.5	73
10	102	73
0	112	111

1-Chlornaphthalene ($C_{10}H_7Cl$) (b.t. = 262.7) + Phenols

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Sat. t.
Pyrocatechol	C ₆ H ₆ O ₂	245.9	59	241.0	90
					(59%)
Resorcinol	C ₆ H ₆ O ₂	281.4	26	255.8	-
Isocugenol	C ₁₀ H ₁₂ O ₂	262.7	92	262.4	-

1-Chlornaphthalene ($C_{10}H_7Cl$) + Trinitroresorcinol
s. ($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	tr.t.	E
100	175.5	-	-
97	170.4	-	-
95	166.6	-	-
90	160.2	-	-
85	154.5	-	-
80	150.0	103.8	91.7
75	145.2	107.0	91.7
70	140.3	109.6	92.2
65	134.9	109.8	92.3
60.12	128.6	109.8	92.2
55	123.0	109.7	-
50	115.2	109.8	-
45	109.2	-	-
40	107.9	-	-
35	104.3	-	-
30	100.3	-	-
25	97.2	-	-
20	92.2	-	-
15	85.0	-	-
10	75.2	-	-
5	58.7	-	-
2.5	35.7	-	-
(1+1)			

1-Chlornaphthalene ($C_{10}H_7Cl$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	min.
100	122.4	-	-
97	119.2	-	-
95	117.0	100.2	120
90	111.8	103.5	540
85	105.6	104.7	680
80	109.8	"	570
75	116.4	"	390
70	120.4	103.6	290
65	123.5	102.9	180
60	125.6	102.2	60
58.44	25.7	-	-
55	"	-	-
50	125.6	-	-
45	125.2	-	-
40	123.8	-	-
35	122.3	-	-
30	118.0	-	-
25	113.4	-	-
20	106.8	-	-
15	96.0	-	-
10	72.4	-	-
5	53.5	-	-
2.5	33.4	-	-

2-Chlornaphthalene ($C_{10}H_7Cl$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	min.
100	122.4	-	-
97	118.2	-	-
95	115.3	77.4	36
90	108.6	78.6	72
85	102.3	79.2	140
80	95.8	"	180
75	88.7	"	280
70	82.8	79.5	330
65	79.9	"	260
60	81.3	"	"
58.49	81.5	"	"
55	81.4	48.6	"
50	80.7	"	90
45	79.1	49.3	160
40	76.3	49.5	240
35	73.0	"	330
30	67.5	"	380
25	61.0	"	480
20	53.2	43.8	620
15	51.6	43.7	530
10	54.9	47.7	330
5	55.6	46.8	110
0	56.7	-	-
(1+1)			

2-Chlornaphthalene ($C_{10}H_7Cl$) + 2-Naphthol ($C_{10}H_8O$)

Grimm, Günther and Tittus, 1931

mol%	f.t.	m.t.
0	123	120
10	118	101
20	114.5	88
30	108.5	71
37	-	62
40	100.5	62
50	92.5	61.5
60	85	61
70	75	60.5
73.0	-	60.5
80	65	58
83	62	56
90	60.5	54
95	-	55
100	58.5	58.5

1-Bromnaphthalene ($C_{10}H_7Br$) (b.t. = 281.2) +
Phenols.

Lecat, 1949.

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Pyro- catechol	$C_6H_6O_2$	245.9	80	245.5	-
Resorcinol	$C_6H_6O_2$	281.4	45	266.3	135.2 (45%)
1-Naphthol	$C_{10}H_8O$	288.0	-	280.9	-

1-Bromnaphthalene ($C_{10}H_7Br$) + Trinitroresorcinol s.
($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	tr.t. (1+1)	E
100	175.5	-	-
97.0	170.6	-	-
95	167.9	-	-
90	162.0	-	-
85	156.8	-	-
80	151.9	95.3	63.0
70	141.8	96.1	70.2
65	137.3	99.4	70.9
60	132.0	100.9	70.9
54.20	123.3	101.0	70.9
50	116.2	101.2	71.0
45	106.0	101.2	-
40	99.8	-	-
35	96.9	-	1.8
30	93.0	-	4.1
25	88.3	-	5.2
20	82.8	-	5.5
15	75.0	-	6.1
10	65.0	-	6.1
5	49.8	-	6.2
2.5	30.7	-	6.2
0	6.4	-	-

1-Bromnaphthalene: ($C_{10}H_7Br$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	min.
100	122.4	-	-
97	120.3	-	-
95	118.0	105.1	96
90	113.6	105.6	190
85	109.2	"	320
80	106.2	-	500
75	115.2	105.6	360
70	121.4	"	220
65	125.5	"	140
60	127.9	"	70
55	129.4	105.0	20
52.53	129.6	-	-
50	"	-	-
45	129.5	-	-
40	128.2	-	-
35	126.6	-	-
30	124.3	-	-
25	120.7	-	-
20	116.3	-	-
15	109.0	-	-
10	97.3	-	-
5	70.6	-	-
2.5	41.3	-	-

(1+1)

2-Bromnaphthalene ($C_{10}H_7Br$) + Trinitroresorcinol
s. ($C_6H_3O_8N_3$)

Efremov, 1916

%	f.t.	tr.t.	E	min.
100	175.5	-	-	-
97	170.9	-	-	-
95	168.4	-	-	-
90	162.2	-	-	-
85	157.5	-	-	-
80	153.8	130.8	-	-
70	147.0	130.8	-	-
65	143.3	130.8	-	-
60	139.4	130.8	-	-
57.5	135.9	130.8	-	-
54.20	134.7	-	-	-
52.5	132.8	-	-	-
50	131.7	-	-	-
45	130.2	-	54.9	48
40	128.8	-	56.9	110
30	122.2	-	56.9	140
25	117.2	-	56.9	240
20	110.0	-	56.9	260
10	85.8	-	56.9	330
5	68.0	-	-	400
2.5	58.8	-	-	460
0	58.3	-	-	-

(1+1)

2-Bromnaphthalene ($C_{10}H_7Br$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	f.t.	E	min.
100	122.4	-	-
97	117.7	-	-
95	114.4	72.4	54
90	107.7	75.6	90
85	101.4	76.3	180
80	94.6	76.2	240
75	97.8	"	480
70	79.9	75.8	480
65	77.7	74.9	190
60	31.7	-	-
55	83.4	-	-
52.53	83.5	-	-
50	83.4	-	-
45	82.3	49.5	36
40	80.4	50.3	120
35	77.9	50.6	190
30	74.0	50.6	290
25	78.8	"	340
20	62.4	"	430
15	51.1	50.2	540
10	50.9	-	720
5	54.6	-	360
2.50	57.0	-	100
0	53.30	-	-

(1+1)

Methyl iodide (CH_3I) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	42.5	
5	-	-2.0
6	41.7	Az
100	100.75	

Methylene bromide (CH_2Br_2) + Acetic acid
($\text{C}_2\text{H}_4\text{O}_2$)

Lecat, 1949

%	b.t.	
0	97.0	
16	94.8	Az
100	118.1	

Methylene iodide (CH_2I_2) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Bingham, 1907

C.S.T. = 45°

Poppe, 1934

C.S.T. = 94.8° dt/dp = +0.0365Methylene iodide (CH_2I_2) (b.t. = 181) + Acids

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Propionic acid	$\text{C}_3\text{H}_6\text{O}_2$	141.3	72	140.65
Butyric acid	$\text{C}_4\text{H}_8\text{O}_2$	164.0	40	159.1
Isobutyric acid	$\text{C}_4\text{H}_8\text{O}_2$	154.6	53	151.8
Isovaleric acid	$\text{C}_5\text{H}_{10}\text{O}_2$	176.5	25	168.5

Methylene iodide (CH_2I_2) + Acids.

Bingham, 1907

2nd comp.		C.S.T.
Propionic acid	$\text{C}_3\text{H}_6\text{O}_2$	52
Isobutyric acid	$\text{C}_4\text{H}_8\text{O}_2$	15
Valeric acid	$\text{C}_5\text{H}_{10}\text{O}_2$	73
Oleic acid	$\text{C}_{18}\text{H}_{34}\text{O}_2$	90

Chloroform (CHCl_3) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	61.2	
9.2	-	-1.3
15	59.15	Az
100	100.75	

Chloroform (CHCl_3) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Skirow, 1902

%	p
0	188
26.67	144.5
56.46	88.5
100	14

Schwers, 1912

t	d	t	d
72.416%		49.056%	
14.5	1.14511	14.5	1.23599
22.3	1.13496	21.9	1.37281
32.0	1.12221	30.0	1.21275
31.381%		19.237%	
14.7	1.31752	11.7	1.38668
23.1	1.30404	20.0	1.37281
30.3	1.29206	30.45	1.35469
0%		100%	
11.2	1.50584	12.5	1.05819
19.3	1.49090	23.9	1.04546
30.65	1.46987	30.4	1.03797

Ritzel, 1907

mol%		d	
25°			
0		1.470	
15.61		1.419	
32.38		1.355	
49.37		1.283	
70.59		1.191	
85.11		1.120	
100		1.042	

p	π	p	π
25°			
0mol%		15.61mol%	
1	103.3	1	102.6
79.5	96.3	88	94.0
173.5	81.6	205.5	82.5
291	75.8	330	72.3
409	67.7	463	66.8
32.38mol%		49.37mol%	
1	100.3	1	98.7
97	92.5	105.5	90.1
216.5	84.6	196	79.0
501.5	66.2	295.5	74.5
		416.5	66.7
70.59mol%		85.11mol%	
1	97.0	1	92.5
103.5	90.2	112	83.40
223.5	77.4	235	74.5
355	66.5	371	66.2
479	650	501	49.4
100 mol%			
1	87.5		
92.5	81.4		
218.5	72.6		
357	65.0		
494	57.1		

Whatmough, 1902

%	σ
18°	
100	27.48
80	26.48
60	26.13
50	26.17
40	26.20
20	26.45
0	26.89

Schwers, 1912.

t	n			
	red	D	blue	violet
10.1	1.44951	1.45206	1.45839	1.46347
25.2	1.44038	1.44290	1.44914	1.45429
43.5	1.42928	1.43176	1.43789	1.44286
61.8	1.41811	1.42051	1.42648	1.43139
10.0	1.42779	1.43019	1.43602	1.44057
21.6	1.42133	1.42373	1.42754	1.43410
41.8	1.42968	1.41225	1.41785	1.42229
13.0	1.41503	1.41733	1.42302	1.42740
24.0	1.40937	1.41157	1.41714	1.42146
43.9	1.39852	1.40068	1.40617	1.41047
54.3	1.39278	1.39493	1.40032	1.40458
12.1	1.40136	1.40315	1.40896	1.41308
22.8	1.30601	1.39811	1.40342	1.40746
39.2	1.38785	1.39015	1.39528	1.39918
12.9	1.38604	1.38763	1.39315	1.39684
22.0	1.38210	1.38411	1.38912	1.39275
39.4	1.37436	1.37635	1.38126	1.38495
57.5	1.36621	1.36818	1.37296	1.37652
21.2	1.36949	1.37146	1.37621	1.37952
31.7	1.36542	1.36738	1.37209	1.37536
49.7	1.35818	1.36014	1.36476	1.36798

Timofeev, 1905

%		U
20°		
0		0.2363
15		0.284
45.2		0.365
100		0.487

%		Q mix
initial	final	
(mole chloroform)		
100	91.9	+549
91.9	84.3	+510
50.7	47.5	+244
(mole acid)		
0	6.0	+473
6.0	10.5	+436
10.5	15.0	+368
94.7	50.8	+474

Chloroform (CHCl_3) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)

Weissenberger, Henke and Katschinka, 1926

mol%	p
20°	
75	35.5
60	57.4
50	73.1
40	89.6
25	115.5
0	160.5

Kovalenko and Trifonov, 1953

mol%	σ	
	0°	33°
100	28.73	25.57
75	28.73	25.38
50	29.02	25.32
25	29.39	25.40
0	30.04	25.57

Chloroform (CHCl_3) + Caprylic acid ($\text{C}_8\text{H}_{16}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
68.1	0.00
87.8	10.00
100	16.30

Chloroform (CHCl_3) + Pelargonic acid ($\text{C}_9\text{H}_{18}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
77.1	0.00
96.0	10.00
100	12.25

Chloroform (CHCl_3) + Caprinic acid ($\text{C}_{10}\text{H}_{20}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
37.9	0.00
55.0	10.00
76.5	20.00
98.5	30.00
100	31.24

Chloroform (CHCl_3) + Undecanoic acid ($\text{C}_{11}\text{H}_{22}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
42.5	0.00
61.7	10.00
82.9	20.00
100	28.13

Chloroform (CHCl_3) + Lauric acid ($\text{C}_{12}\text{H}_{24}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
18.3	0.0
28.1	10.0
45.5	20.0
67.4	30.0
95.4	40.0
100	43.92

Chloroform (CHCl_3) + Tridecanoic acid ($\text{C}_{13}\text{H}_{26}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
22.1	0.0
34.6	10.0
53.9	20.0
76.0	30.0
98.4	40.0
100	41.76

Chloroform (CHCl_3) + Myristic acid ($\text{C}_{14}\text{H}_{28}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
7.5	0.0
13.1	10.0
24.5	20.0
43.8	30.0
67.2	40.0
90.9	50.0
100	54.15

Chloroform (CHCl_3) + Pentadecanoic acid ($\text{C}_{15}\text{H}_{30}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
8.7	0.0
15.0	10.0
27.6	20.0
47.7	30.0
71.1	40.0
94.6	50.0
100	52.54

Chloroform (CHCl_3) + Palmitic acid ($\text{C}_{16}\text{H}_{32}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
2.8	0.0
5.7	10.0
13.1	20.0
26.7	30.0
47.7	40.0
71.4	50.0
94.7	60.0
100	62.82

Chloroform (CHCl_3) + Margaric acid
($\text{C}_{17}\text{H}_{34}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
3.5	0.0
7.0	10.0
15.1	20.0
29.9	30.0
51.4	40.0
74.8	50.0
98.0	60.0
100	60.94

Chloroform (CHCl_3) + Stearic acid ($\text{C}_{18}\text{H}_{36}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
0.4	0.0
2.0	10.0
5.7	20.0
14.9	30.0
32.7	40.0
55.4	50.0
78.4	60.0
100	69.32

Chloroform (CHCl_3) + Oleic acid ($\text{C}_{18}\text{H}_{34}\text{O}_2$)

Hoerr and Harwood, 1952

%	f.t.
10.3	-40
16.9	-30
31.5	-20
47.9	-10
67.2	0
88.3	10

Chloroform (CHCl_3) + Linoleic acid ($\text{C}_{18}\text{H}_{32}\text{O}_2$)

Hoerr and Harwood, 1952

%	f.t.
16.0	-50
28.6	-40
46.9	-30
67.8	-20
88.5	-10

Chloroform (CHCl_3) + o-Nitrobenzoic acid
($\text{C}_7\text{H}_5\text{O}_4\text{N}$)

Collett and Lazzell, 1930

mol%	f.t.	mol%	f.t.
100.00	147.7	48.63	118.9
88.01	139.9	38.35	114.1
72.40	131.9	23.74	106.2
71.12	130.8	16.94	101.3
60.72	126.0	5.50	84.2
59.19	125.0	2.11	64.2
54.27	121.2		

Chloroform (CHCl_3) + m-Nitrobenzoic acid
($\text{C}_7\text{H}_5\text{O}_4\text{N}$)

Collett and Lazzell, 1930

mol %	f.t.	mol %	f.t.
100.00	142.4	38.61	100.0
84.97	132.1	38.27	99.8
71.93	124.3	22.82	85.3
58.32	113.9	11.64	67.5
47.06	105.8	5.69	47.7
38.94	100.5		

Bromoform (CHBr_3) (b.t. = 149.5) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH_2O_2	100.75	48	97.4	-
Acetic acid	$\text{C}_2\text{H}_4\text{O}_2$	118.1	82	117.9	-0.3 (82%)
Monochlor-acetic acid	$\text{C}_2\text{H}_3\text{O}_2\text{Cl}$	189.35	31	148.5	-
Propionic acid	$\text{C}_3\text{H}_6\text{O}_2$	141.3	37	138.0	-0.4 (60%)
Butyric acid	$\text{C}_4\text{H}_8\text{O}_2$	164.0	68	146.8	-0.3 (10%)
Isobutyric acid	$\text{C}_4\text{H}_8\text{O}_2$	154.6	19	145.0	-0.4 (20%)
Isovaleric acid	$\text{C}_5\text{H}_{10}\text{O}_2$	176.5	4	148.7	-0.2 (10%)

Bromoform (CHBr_3) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)

Holley and Weaver, 1905

%	b.t.
0	145.5
12.5	142.6
100	158 - 159

Dichlorbrommethane (CHCl_2Br) + Formic acid
(CH_2O_2)

Lecat, 1949

%	b.t.	Sat.t.
0	90.1	
24	78.15	Az
100	100.75	61.3

Carbon tetrachloride (CCl_4) + Formic acid
(CH_2O_2)

Lecat, 1949

%	b.t.
0	76.75
18.5	66.65 Az
100	100.75

Bingham, 1907

C.S.T. = 220°

Carbon tetrachloride (CCl_4) + Acetic acid
($\text{C}_2\text{H}_4\text{O}_2$)

Lecat, 1949

%	b.t.	Dt mix
0	76.75	
3	76.55	Az
12		
100	118.1	-1.1

Schwers, 1912

t	d	t	d
0%		35.564%	
17.0	1.60012	16.45	1.33899
24.1	1.58622	24.2	1.32430
30.5	1.57358	30.4	1.31564
58.272%		78.861%	
14.2	1.22167	14.6	1.13292
21.35	1.21144	21.1	1.12456
29.3	1.19984	29.2	1.11416
100%			
12.5	1.05819		
23.9	1.04546		
30.4	1.03797		

Jones, Bowden, and al., 1948

%	d	η
25°		
0	1.5844	902
5	1.5391	840
10	1.4983	822
15	1.4599	811
20	1.4241	808
40	1.2989	832
50	1.2468	863
60	1.1989	900
80	1.1154	1007
100	1.0442	1126

Whitnough, 1902

mol%	σ
18°	
100	27.56
80	26.20
60	25.80
50	25.77
40	25.79
20	26.03
0	26.55

Schwers, 1912.

t	6563 Å	5893 Å	4960 Å	4360 Å
0%				
10.7	1.46276	1.46563	1.47263	1.47817
23.8	1.45503	1.45786	1.46468	1.47023
37.1	1.44710	1.44989	1.45650	1.46199
49.0	1.43996	1.44266	1.44906	1.45451
35.564%				
14.5	1.41462	1.41676	1.42261	1.42714
22.55	1.40762	1.41277	1.41850	1.42304
34.4	1.40439	1.40660	1.41225	1.41667
48.0	1.39726	1.39949	1.40477	1.40917
58.272%				
13.35	1.39593	1.39829	1.40352	1.40747
39.5	1.38357	1.38572	1.39090	1.39476
57.0	1.37494	1.37708	1.38215	1.38585
78.861%				
13.05	1.38315	1.38524	1.39038	1.39401
24.5	1.37842	1.38050	1.38541	1.38916
40.3	1.37135	1.37340	1.37832	1.38189
100%				
21.2	1.36949	1.37146	1.37621	1.37952
31.7	1.36542	1.36738	1.37209	1.37536
49.7	1.35818	1.36014	1.36476	1.36798

Elskens, 1948

vol%	ϵ (1 Kcycle)
20°	
0	2.2
25	3.3
50	4.5
75	5.9
100	7.1

Schwers, 1912

%	(α) magn.	5895 Å	5460 Å	4360 Å
15°				
100	0.6675	0.7838	1.2836	
78.681	0.7163	0.8419	1.3758	
58.272	0.7739	0.8981	1.4834	
35.564	0.8525	1.0015	1.6387	
0	1.0337	1.2211	2.0135	

Timofeev, 1905

%	U
20°	
100	0.487
16.3	0.260
0	0.2067

%	Q dil	
initial	final	
(by mole acid)		
0	4.1	-371
4.1	7.3	-243
7.3	10.3	-187
10.3	13.3	-159
13.3	16.3	-138
100	93.2	-247

Carbon tetrachloride (CCl_4) + Butyric acid
($\text{C}_4\text{H}_8\text{O}_2$)

Jones, Bowden and al., 1948

%	d	η
25°		
0	1.5844	902
5	1.5293	911
10	1.4827	925
15	1.4404	945
20	1.3945	966
40	1.2493	1079
50	1.1884	1142
60	1.1372	1201
80	1.0407	1331
100	0.9535	1466

Carbon tetrachloride (CCl_4) + Caproic acid
($\text{C}_6\text{H}_{12}\text{O}_2$)

Jones, Bowden and al., 1948

%	d	η
25°		
0	1.5844	902
5	1.5297	966
10	1.4767	1033
15	1.4281	1108
20	1.3834	1188
40	1.2290	1548
50	1.1638	1743
60	1.1112	1927
80	1.0133	2343
100	0.9238	2814

Carbon tetrachloride (CCl_4) + Heptanoic acid
($\text{C}_7\text{H}_{14}\text{O}_2$)

Jones, Bowden and al., 1948

%	d	η
25°		
0	1.5844	902
5	1.5298	990
10	1.4746	1080
15	1.4252	1175
20	1.3781	1271
40	1.2220	1767
50	1.1559	2046
60	1.1009	2362
80	1.0040	3015
100	0.9130	3784

Carbon tetrachloride (CCl_4) + Caprylic acid
($\text{C}_8\text{H}_{16}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
53.5	0.0
78.7	10.0
100	16.30

Jones, Bowden and al., 1948

%	d	η
25°		
0	1.5844	902
5	1.5275	1011
10	1.4727	1124
15	1.4219	1248
20	1.3763	1380
40	1.2180	2021
50	1.1517	2406
60	1.0898	2867
80	0.9936	3905
100	0.9064	5160

Carbon tetrachloride (CCl_4) + Pelargonic acid
($\text{C}_9\text{H}_{18}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
61.2	0.0
92.0	10.0
100.0	12.25

Carbon tetrachloride (CCl_4) + Capric acid
($\text{C}_{10}\text{H}_{20}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
21.3	0.0
39.0	10.0
67.8	20.0
97.8	30.0
100	31.24

Carbon tetrachloride (CCl_4) + Undecylic acid
($\text{C}_{11}\text{H}_{22}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
25	0.0
46.9	10.0
76.1	20.0
100	28.13

Carbon tetrachloride (CCl_4) + Lauric acid
($\text{C}_{12}\text{H}_{24}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
8.5	0.0
17.0	10.0
34.7	20.0
61.6	30.0
81.3	40.0
100	43.92

Carbon tetrachloride (CCl_4) + Tridecanoic acid
($\text{C}_{13}\text{H}_{26}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
10.1	0.0
20.1	10.0
42.9	20.0
70.6	30.0
98.1	40.0
100	41.76

Carbon tetrachloride (CCl_4) + Myristic acid
($\text{C}_{14}\text{H}_{28}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
3.1	0.0
6.4	10.0
12.7	20.0
35.5	30.0
62.3	40.0
89.6	50.0
100	54.15

Carbon tetrachloride (CCl_4) + Pentadecanoic acid
($\text{C}_{15}\text{H}_{30}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
3.7	0.0
7.8	10.0
18.2	20.0
40.9	30.0
67.5	40.0
93.8	50.0
100	52.54

Carbon tetrachloride (CCl_4) + Palmitic acid
($\text{C}_{16}\text{H}_{32}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
0.6	0.0
1.8	10.0
5.5	20.0
17.6	30.0
41.9	40.0
68.0	50.0
94.0	60.0
100	62.82

Carbon tetrachloride (CCl_4) + Margaric acid
($\text{C}_{17}\text{H}_{34}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
0.7	0.0
2.0	10.0
6.4	20.0
20.1	30.0
45.4	40.0
71.5	50.0
97.8	60.0
100	60.94

Carbon tetrachloride (CCl_4) + Stearic acid
($\text{C}_{18}\text{H}_{36}\text{O}_2$)

Eykmán, 1889

%	D f.t.
95.39	-1.369
90.316	2.912
87.19	3.888
83.32	5.14

Hoerr and Raiston, 1944

%	f.t.
0.2	10.0
2.3	20.0
9.7	30.0
26.7	40.0
51.8	50.0
76.5	60.0
100	69.32

Carbon tetrachloride (CCl₄) + Oleic acid
(C₁₈H₃₄O₂)

Hoerr and Harwood, 1952

%	f.t.
9.4	-25.6
19.8	-20.0
40.5	-10.0
61.6	0.0
85.5	10.0
100	20.0

Carbon tetrachloride (CCl₄) + Linoleic acid
(C₁₈H₃₂O₂)

Hoerr and Harwood, 1952

%	f.t.
31.9	-35.3 E
41.1	-30
61.5	-20
85.7	-10
100	0

Carbon tetrachloride (CCl₄) + Tartaric acid d
(C₄H₆O₆)

Findlay and Campbell, 1928

%	f.t.
38.27	0
66.4	15
76.3	25
85.5	40

Carbon tetrachloride (CCl₄) + Tartaric acid rac.
(C₄H₆O₆)

Findlay and Campbell, 1928

%	f.t.
14.01	0
17.20	15
22.5	25
35.7	40

Carbon tetrachloride (CCl₄) + Benzoic acid
(C₇H₆O₂)

Mortimer, 1923

%	f.t.
1.7	0
4.2	20
9.4	40
20.0	60
100.0	121.0

Carbon tetrachloride (CCl₄) + o-Nitrobenzoic acid
(C₇H₅O₄N)

Collett and Lazzell, 1930

mol%	f.t.	Sat.t.
100.00	147.7	-
9.74	-	127.2
3.59	-	120.9

Carbon tetrachloride (CCl₄) + m-Nitrobenzoic acid
(C₇H₅O₄N)

Collett and Lazzell, 1930

mol%	f.t.
100.00	142.4
83.30	132.3
68.62	124.9
51.46	119.3
39.65	117.0
35.32	115.9
20.37	112.3
9.52	107.2
3.37	95.6

Ethylbromide (C_2H_5Br) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	Dt mix
0	38.4	
2	-	-1.15
3.0	38.23 Az	
100	100.75	

Ethyl bromide (C_2H_5Br) + Butyric acid ($C_4H_8O_2$)

Konovalov, 1907

mol %	p	mol %	p
	18.1°		
0	347.5	65.84	177.5
25.06	306.4	79.20	114.1
50.00	235.2		

Ethyl bromide (C_2H_5Br) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Konovalov, 1907

mol %	p	mol %	p
	18.1°		
0	347.5	67.16	176.5
25.13	306.4	80.22	115.7
48.56	240.8		

Ethyl iodide (C_2H_5I) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	72.3
21	65.0 Az
100	100.75

Ethyl iodide (C_2H_5I) + Acetic acid ($C_2H_4O_2$)

Whatmough, 1902

mol %	mol %
	18°
100	27.56
80	26.21
60	26.20
50	26.33
40	26.52
20	27.16
0	28.29

Ethylene chloride ($C_2H_4Cl_2$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	83.45
20	77.2 Az
100	100.75

Ethylene chloride ($C_2H_4Cl_2$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol%	mol%
L	V
	b. t.
100	100
95	86.7
90	72.6
80	50.3
70	35.4
60	25.8
50	18.0
40	12.6
30	8.8
20	5.5
10	2.8
0	0

Schwers, 1912

t	d	t	d
100%	73.407%		
12.5	1.05819	10.1	1.10223
23.9	1.04546	20.0	1.09026
30.4	1.03797	31.3	1.07690
53.052%	30.432%		
11.4	1.13834	10.4	1.18804
20.95	1.12615	21.3	1.17327
30.3	1.11395	30.3	1.16102
11.610%	0%		
10.7	1.23438	17.2	1.25750
20.25	1.22088	23.8	1.24792
30.2	1.20640	30.1	1.23841

t	n	n	n
	red	D	blue violet
	100 %		
21.2	1.36949	1.37146	1.37621
31.7	1.36542	1.36738	1.37209
49.7	1.35818	1.36014	1.36476
	73.407 %		
9.0	1.38808	1.39018	1.39517
21.2	1.38284	1.38488	1.38985
41.8	1.37389	1.37589	1.38063
56.0	1.36754	1.36952	1.37420
	52.052 %		
9.7	1.40089	1.40307	1.40834
20.2	1.39622	1.39835	1.40348
37.2	1.38813	1.39022	1.39518
55.3	1.37937	1.38143	1.38640
			1.38998

30 432 %				
8.6	1.41890	1.42113	1.42659	1.43066
23.5	1.41148	1.41370	1.41913	1.42325
42.0	1.40214	1.40431	1.40958	1.41356
50.1	1.39788	1.40006	1.40534	1.40922
11.610 %				
9.0	1.43592	1.43825	1.44406	1.44855
28.5	1.42577	1.42811	1.43380	1.43816
52.3	1.41295	1.41534	1.42087	1.42488
0 %				
9.7	1.44781	1.45031	1.45640	1.46117
25.4	1.43931	1.44178	1.44781	1.45248
43.0	1.42964	1.43210	1.43788	1.44242
62.5	1.41887	1.42124	1.42680	1.43113

Ethylene chloride ($C_2H_4Cl_2$) + Caprylic acid ($C_8H_{16}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
59.0		0.0		
86.3		10.0		
100		16.30		

Ethylene chloride ($C_2H_4Cl_2$) + Capric acid ($C_{10}H_{20}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
17.6		0.0		
43.8		10.0		
72.2		20.0		
97.5		30.0		
100		31.24		

Ethylene chloride ($C_2H_4Cl_2$) + Lauric acid ($C_{12}H_{24}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
1.2		0.0		
6.1		10.0		
26.7		20.0		
41.1		30.0		
92.4		40.0		
100		43.92		

Ethylene chloride ($C_2H_4Cl_2$) + Myristic acid ($C_{14}H_{28}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
0.8		10.0		
4.8		20.0		
26.2		30.0		
62.1		40.0		
94.0		50.0		
100		54.15		

Ethylene chloride ($C_2H_4Cl_2$) + Palmitic acid ($C_{16}H_{32}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
0.6		20.0		
5.7		30.0		
28.3		40.0		
65.2		50.0		
94.2		60.0		
100		62.82		

Ethylene chloride ($C_2H_4Cl_2$) + Stearic acid ($C_{18}H_{36}O_2$)				
Hoerr, Sedgwick and Ralston, 1946				
%		f. t.		
1.0		30.0		
9.1		40.0		
41.1		50.0		
73.6		60.0		
100		69.32		

Ethylene chloride ($C_2H_4Cl_2$) + Oleic acid ($C_{18}H_{34}O_2$)				
Hoerr and Harwood, 1952				
%		f. t.		
0.1		-30		
1.3		-20		
20.7		-10		
56.5		0		
87.0		10		

Ethylene chloride ($C_2H_4Cl_2$) + Succinic acid
 ($C_4H_6O_4$)

Timmermans and Vesselowsky, 1931

mol%	f. t.	mol%	f. t.
0	-36	14.1	+171.5
0.8	+142	25.0	+172.0
1.0	+164	50.0	+177.5
2.0	+166	75.0	+181.5
8.7	+171	100	+185.0

E : -43.5°

Lecat, 1949

 Ethylene bromide ($C_2H_4Br_2$) (b. t. 131.65) +
 Acids

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Formic acid	CH_2O_2	100.75	51.5	94.65	71.8 (51.5%)
Acetic acid	$C_2H_4O_2$	118.1	55	114.3	-1.7 (50%)
Propionic acid	$C_3H_6O_2$	141.3	17.5	127.95	-2.2 (19%)
Butyric acid	$C_4H_8O_2$	164.0	3.5	131.1	-0.7 (3.5%)
Isobutyric acid	$C_4H_8O_2$	154.6	7.5	130.0	-0.8 (5%)

 Ethylene bromide ($C_2H_4Br_2$) + Acetic acid
 ($C_2H_4O_2$)

Dahms, 1905

mol%	f. t.	mol%	f. t.
0	9.69	53.97	-1.0
0.934	9.39	60.85	+0.9
3.67	8.54	70.01	3.4
11.60	6.30	76.25	5.29
14.87	5.41	81.22	6.95
23.75	3.11	85.84	8.59
29.98	1.69	90.47	10.51
36.48	0.08	95.49	12.92
42.45	-1.45	97.30	13.91
47.1	-2.76	99.951	14.93
47.3	-2.79	99.703	15.26
48.72	-2.4	100	15.44
50.71	-1.9		

Ramsay and Aston, 1902

%	d			
	14.0°	46.0°	78.0°	132.0°
0	2.1909	2.1264	2.0590	1.9843
9.66	2.0367	1.9765	1.9125	1.7997
19.45	1.8972	1.8463	1.7857	1.6789
40.86	1.6376	1.5996	1.5469	1.4508
61.62	1.4107	1.3788	1.3317	1.2477
80.27	1.2252	1.1866	1.1453	1.0716
90.30	1.1392	1.1044	1.0656	0.9963
100	1.0553	1.0216	0.9857	0.9205

%	σ			
	14.0°	46.0°	78.0°	132.0°
0	38.67	34.43	30.47	23.68
9.66	31.83	29.26	27.21	21.94
19.45	31.64	28.30	25.02	19.80
40.86	30.16	26.65	23.38	18.00
61.62	28.83	25.38	22.16	17.09
80.27	28.16	24.32	21.16	16.26
90.30	27.57	23.99	20.95	16.37
100	23.86	21.74	19.62	16.11

Gay, 1911

mol %	Dv (cc/mole)
at room t.	
36.230	0.588
63.208	0.686
83.451	0.476

Ethylidene bromide ($C_2H_4Br_2$) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	109.5	
25	103.7	Az
50	-	
100	118.1	-1.8

Ethylene chlorbromide (C_2H_4ClBr) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b. t.	
0	106.7	
22	102.0	Az
100	118.1	

Ethylene bromiodide cis. (C_2H_4BrI) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b. t.	
0	149.05	
59.5	115.6	Az
100	118.1	

Ethylene bromiodide cis. (C_2H_4BrI) + Propionic
acid ($C_3H_6O_2$)

Lecat, 1949

%	b. t.	
0	149.05	
34.8	135.3	Az
100	141.3	

1,1,2-Trichlorethane ($C_2H_3Cl_3$) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b. t.	
0	113.65	
30	106.0	Az
100	118.1	

Acetylene tetrachloride ($C_2H_2Cl_4$) (b. t. = 146.2)
+ Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Formic acid	CH_2O_2	100.75	68	99.25	-
Propionic acid	$C_3H_6O_2$	141.3	50	140.7	+2.4 (61%)
Butyric acid	$C_4H_8O_2$	164.0	3.8	145.6	+0.5 (5%)
Isobutyric acid	$C_4H_8O_2$	154.6	8	144.8	+1.4 (10%)

Acetylene tetrachloride ($C_2H_2Cl_4$) + Succinic acid
($C_4H_6O_4$)

Timmermans and Vesselowsky, 1931

mol%	f. t.
0	-42.5
5.7	+15
13.0	170
45.1	172.5
75.2	175.7
100	182.5

E : -43.7°

Pentachlorethane (C_2HCl_5) (b.t. = 162.0) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Butyric acid	$C_4H_8O_2$	164.0	26	156.8	+8 (50%)
Isobutyric acid	$C_4H_8O_2$	154.6	43	152.9	+2 (43%)
Valeric acid	$C_5H_{10}O_2$	186.35	2.8	161.5	+0.8 (10%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	9	160.25	+0.7 (9%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	9.9	158.7	43 (9.9%)
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	3	161.9	-

Perchlorethane (C_2Cl_6) (b.t. = 184.8) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Valeric acid	$C_5H_{10}O_2$	186.35	30	179.0	-
Isovaleric acid	$C_5H_{10}O_2$	176.5	37	172.6	104 (37%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	25	171.2	-
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	22	183.0	-

Propylchloride (C_3H_7Cl) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	46.65	
8	45.7 Az	
10	-	-2.5
100	100.75	

Isopropyl chloride (C_3H_7Cl) + Formic acid
(CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	34.9	
1.8	34.8 Az	
2	-	-1.4
100	100.75	

Propyl bromide (C_3H_7Br) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	71.0
27	64.7 Az
100	100.75

Isopropyl bromide (C_3H_7Br) + Formic acid (CH_2O_2)

Lecat, 1944

%	b.t.
0	59.4
14	56.1 Az
100	100.75

Propyl iodide (C ₃ H ₇ I) + Formic acid (CH ₂ O ₂)			
Lecat, 1949			
%	b. t.		
0	102.4		
36	82.4	Az	
100	100.75		

Propyl iodide (C ₃ H ₇ I) + Acetic acid (C ₂ H ₄ O ₂)			
Lecat, 1949			
%	b. t.	Dt mix	
0	102.4		
16	98.0	Az	
20	-	-1.9	
100	118.1		

Isopropyl iodide (C ₃ H ₇ I) + Formic acid (CH ₂ O ₂)			
Lecat, 1949			
%	b. t.		
0	89.45		
29	75.2	Az	
100	100.75		

Isopropyl iodide (C ₃ H ₇ I) + Acetic acid (C ₂ H ₄ O ₂)			
Lecat, 1949			
%	b. t.	Dt mix	
0	89.45		
9	87.2	Az	
20	-	-2.2	
100	118.1		

 | | | | | |--|--------|-------|--| | Acetone dichloride (C ₃ H ₆ Cl ₂) + Formic acid | | | | | Lecat, 1949 CH ₂ O ₂) | | | | | % | | b. t. | | | 0 | 70.4 | | | | 25 | 66.0 | Az | | | 100 | 100.75 | | | | | | | | | | |---|--|-------|----|-------|------------| | Propylene bromide (C ₃ H ₆ Br ₂) (b. t. = 140.5) + | | | | | | | Lecat, 1949 Acids | | | | | | | 2nd Comp. | | | Az | | | | Name | Formula | b. t. | % | b. t. | Dt mix | | Acetic acid | C ₂ H ₄ O ₂ | 118.1 | 70 | 116.0 | -1.2 (70%) | | Propionic acid | C ₃ H ₆ O ₂ | 141.3 | 33 | 134.5 | -0.6 (50%) | | Butyric acid | C ₄ H ₈ O ₂ | 164.0 | 8 | 138.5 | - | | Isobutyric acid | C ₄ H ₈ O ₂ | 141.3 | 15 | 137.0 | -1.0 (10%) | | | | | | | | |--|--|--------------|--|--|--| | Propylene bromide (C ₃ H ₆ Br ₂) + Acetic acid (C ₂ H ₄ O ₂) | | | | | | | Gay, 1911. | | | | | | | mol% | | Dv (cc/mole) | | | | | 47.396 | | 0.662 | | | | | 70.310 | | 0.662 | | | | | | | | | | | |--|---|--------|------|--------|--| | Lecat, 1949 | | | | | | | Trimethylene bromide (C ₃ H ₆ Br ₂) (b. t. = 166.9) + | | | | | | | Acids | | | | | | | 2nd Comp. | | | Az | | | | Name | Formula | b. t. | % | b. t. | | | Butyric acid | C ₄ H ₈ O ₂ | 164.0 | 30 | 158.4 | | | Isobutyric acid | C ₄ H ₈ O ₂ | 154.6 | 60 | 151.5 | | | Valeric acid | C ₅ H ₁₀ O ₂ | 186.35 | 8 | 166.0 | | | Isovaleric acid | C ₅ H ₁₀ O ₂ | 176.5 | 15.5 | 163.35 | | |

Trichlorhydrin ($C_3H_5Cl_3$) (b.t. = 156.85) + Acids Lecat, 1949						Butylchlorides (C_4H_9Cl) + Acids. Lecat, 1949.					
2nd Comp.		Az				Name	Formula	b.t.	%	Az	Dt mix
Name	Formula	b.t.	%	b.t.	Dt mix						
Propionic acid	$C_3H_6O_2$	141.3	65	139.5	-0.3	Butylchloride + Formic acid	CH_2O_2	100.75	25	69.4	-
Butyric acid	$C_4H_8O_2$	164.0	23	152.0	-0.3 (25%)	Butylchloride + Acetic acid	$C_2H_4O_2$	118.1	3	78.0	-0.4
Isobutyric acid	$C_4H_8O_2$	154.6	38	149.0	-	Isobutylchloride + Formic acid	CH_2O_2	100.75	19	62.95	-
Valeric acid	$C_5H_{10}O_2$	176.35	7	155.0	-	tert. Butyl chloride + Formic acid	CH_2O_2	100.75	11	49.3	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	10	154.5	-						
Tribromhydrin ($C_3H_5Br_3$) + Heptanoic acid ($C_7H_{14}O_2$) Lecat, 1949						Butyl bromides (C_4H_9Br) + Acids. Lecat, 1949.					
		Az				Name	Formula	b.t.	%	b.t.	Dt mix
		%	b.t.								
		0	221			Iso + Formic acid	CH_2O_2	91.4	30	26.7	-
		38	218.0	Az		Iso + Acetic acid	$C_2H_4O_2$	91.4	13	89.5	-1.6 (20%)
		100	222.0			Sec. + Acetic acid	$C_2H_4O_2$	91.2	13	89.0	-0.6 (10%)
						Tert. + Formic acid	CH_2O_2	73.3	22	66.2	-
						Butylbromide + Formic acid	CH_2O_2	100.75	35	81.4	-
						Butylbromide + Acetic acid	$C_2H_4O_2$	118.1	20	97.0	-1.5
Tribromhydrin ($C_3H_5Br_3$) + Benzoic acid ($C_7H_6O_2$) Lecat, 1949											
		%	b.t.								
		0	221								
		6	220.5	Az							
		100	250.8								

Butyl bromide (C_4H_9Br) + Acetic acid ($C_2H_4O_2$)

Schwers, 1912

t	d	t	d
0%		31.909%	
10.8	1.22678	14.45	1.15152
20.5	1.21142	23.3	1.13901
30.2	1.19534	31.0	1.12783
56.353%		78.039%	
14.4	1.11132	14.4	1.08095
21.7	1.10189	23.5	1.07000
31.0	1.08960	30.3	1.06157
100%			
12.5	1.05819		
23.9	1.04546		
30.4	1.03797		

t	red	D	blue	violet
0%				
10.4	1.42954	1.43228	1.43921	1.44449
26.0	1.42056	1.42332	1.43015	1.43537
58.8	1.40110	1.40357	1.41019	1.41523
31.909%				
13.25	1.40317	1.40554	1.41153	1.41602
40.7	1.38886	1.39116	1.39701	1.40138
56.353%				
13.5	1.38954	1.39173	1.39720	1.40120
24.0	1.38473	1.38693	1.39226	1.39623
36.1	1.37895	1.38118	1.38645	1.39044
78.039%				
14.15	1.37958	1.38150	1.38666	1.39027
24.4	1.37505	1.37717	1.38221	1.38588
44.4	1.36648	1.36843	1.37346	1.37697
100%				
21.2	1.36949	1.37146	1.37621	1.37952
31.7	1.36542	1.36738	1.37209	1.37536
49.7	1.35818	1.36014	1.36476	1.36798

Butyl iodide (C_4H_9I) (b.t. = 130.4) + Acids
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Formic acid	CH_2O_2	100.75	52	92.6
Acetic acid	$C_2H_4O_2$	118.1	47	112.4
Propionic acid	$C_3H_6O_2$	141.3	15	126.8
Butyric acid	$C_4H_8O_2$	164.0	2.5	129.8
Isobutyric acid	$C_4H_8O_2$	154.6	7	128.8

Isobutyl iodide (C_4H_9I) (b.t. = 100.75) + Acids
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t. Dt mix
Formic acid	CH_2O_2	100.75	45	89.75 -
Acetic acid	$C_2H_4O_2$	118.1	35	108.2 -3.5
Propionic acid	$C_3H_6O_2$	141.3	7	119.3 -0.6
				(50%)
				(10%)

Sec. Butyl iodide (C_4H_9I) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

		b.t.	
		Az	
	0	120.0	
	30	110.7	
	100	118.1	

Isoamyl chloride (C ₅ H ₁₁ Cl) + Formic acid (CH ₂ O ₂)					
Lecat, 1949					
%		b.t.			
0		99.4			
32		80.1		Az	
100		100.75			
Isoamyl chloride (C ₅ H ₁₁ Cl) + Acetic acid (C ₂ H ₄ O ₂)					
Lecat, 1949					
%		b.t.		Dt mix	
0		99.4			
15		-		-2.2	
20		96.0		Az	
100		118.1			
Lecat, 1949					
Isoamyl bromide (C ₅ H ₁₁ Br) (b.t. = 120.65) + Acids					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH ₂ O ₂	100.75	47	90.0	-
Acetic acid	C ₂ H ₄ O ₂	118.1	37	108.65	-2.4 (50%)
Propionic acid	C ₃ H ₆ O ₂	141.3	7.5	119.45	-0.4 (11%)
Isobutyric acid	C ₄ H ₈ O ₂	154.6	3	120.2	-0.8 (10%)
Perfluoro-n-hexane (C ₆ F ₁₄) + Pentafluoropropionic acid (C ₃ HO ₂ F ₅)					
Newcome and Cady, 1956.					
mol%		Dew p.		Bubble p.	
25°					
100.0		30.0		-	
50.4		142.6		183.0	
24.5		174.7		201.5	
0.0		219.2		-	

Isoamyl iodide (C ₅ H ₁₁ I) (b.t. = 147.65) + Acids					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH ₂ O ₂	100.75	62	97.0	-
Acetic acid	C ₂ H ₄ O ₂	118.1	75	116.5	-
Monochlor- acetic acid	C ₂ H ₃ O ₂ Cl	189.35	-	146.5	-
Propionic acid	C ₃ H ₆ O ₂	141.3	42	136.5	-1.5 (44%)
Butyric acid	C ₄ H ₈ O ₂	164.0	13	144.4	-
Isobutyric acid	C ₄ H ₈ O ₂	154.6	25	142.5	-
Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	3	147.0	-
Hexylbromide (C ₆ H ₁₃ Br) (b.t. = 156.5) + Acids					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Acetic acid	C ₂ H ₄ O ₂	118.1	92	117.5	-1.2 (80%)
Propionic acid	C ₃ H ₆ O ₂	141.3	60	139.0	-0.8 (60%)
Butyric acid	C ₄ H ₈ O ₂	164.0	25	151.5	-0.6 (25%)
Isobutyric acid	C ₄ H ₈ O ₂	154.6	35	148.0	-1.0 (30%)
Valeric acid	C ₅ H ₁₀ O ₂	186.35	4.5	155.5	-0.3 (10%)
Isovaleric acid	C ₅ H ₁₀ O ₂	176.5	10	155.0	-0.3 (10%)

Trichlorethylene (C_2HCl_3) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	
0	86.9	
25	74.1	Az
100	100.75	

Trichlorethylene (C_2HCl_3) + Acetic acid
($C_2H_4O_2$)

Lecat, 1949

%	b. t.		Dt mix
0	86.9		
3.8	86.45	Az	
10	-		-0.35
100	118.1		

Perchloroethylene (C_2Cl_4) (b. t. = 122.1) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Formic acid	CH_2O_2	100.75	88.15	119.1	-
Acetic acid	$C_2H_4O_2$	118.1	38	104.35	-1.7 (50%)
Propionic acid	$C_3H_6O_2$	141.3	8.5	119.1	-1.0 (50%)
Butyric acid	$C_4H_8O_2$	164.0	1.2	121.0	-0.4 (10%)
Isobutyric acid	$C_4H_8O_2$	154.6	3	120.1	-0.3 (5%)

Allyl halides + Formic acid (CH_2O_2) (b. t. = 100.75)

Lecat, 1949

Name	Formula	Az		
		b. t.	%	b. t.
Allyl chloride	C_3H_5Cl	45.15	7.5	44.4
Allyl bromide	C_3H_5Br	70.5	22	64.5
Allyl iodide	C_3H_5I	101.8	33	81.0

Allyl iodide (C_3H_5I) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.	
0	101.8	
15	97.2	Az
100	118.1	

Fluorobenzene (C_6H_5F) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.	
0	84.9	
27	73.0	Az
100	100.75	

Lecat, 1949

Chlorobenzene (C_6H_5Cl) (b. t. = 131.75) + Acids

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Formic acid	CH_2O_2	100.75	68	99.25	-
Acetic acid	$C_2H_4O_2$	118.1	58.5	114.6	-0.8 (50%)
Propionic acid	$C_3H_6O_2$	141.3	18	128.7	+0.2 (18%)
Butyric acid	$C_4H_8O_2$	164.0	2.8	131.5	+0.5 (10%)
Isobutyric acid	$C_4H_8O_2$	154.6	8	130.5	-0.2 (5%)
Pyruvic acid	$C_3H_4O_3$	166.8	15	128.6	25 (15%)

Chlorobenzene (C_6H_5Cl) + Formic acid (CH_2O_2)

Bingham, 1907

C.S.T. = 110

Timmermans and Kohnstamm, 1909 - 1910

C.S.T.	limits of pressure (Kg)	dt/dp
106.6	5 - 65	+0.035

Chlorobenzene (C_6H_5Cl) + Acetic acid ($C_2H_4O_2$)

Baud, 1913

mol%	f. t.
100	16.70
95.2	14.60
91.0	12.65
84.0	0.72
78.0	7.20
72.2	4.74
62.5	1.60
54.0	-1.50
40.0	-7.30
34.7	-9.90

Burnham and Madgin, 1936 (fig.)

mol%	f. t.
0	-45.2
3	-49
10	-40
20	-28.5
30	-17.5
40	-11
50	-4
60	-1
70	+3.5
80	+8
90	+12
100	+16.7

Piercy and Lamb, 1956

mol%	v	mol%	v
25°			
0	1269	11.3	1248
3.07	1259	19.3	1232
5.98	1255		

v = sound velocity in m/sec.

Burnham and Madgin, 1936.

mol%	n_D
25°	
100	1.3730
80	1.4150
60	1.4480
40	1.4720
20	1.5015
0	1.5221

Timofeev, 1905

% initial final		Q mix (by mole acid)
0	5.9	-216
5.9	10.6	-127
15.6	14.8	-106

Chlorobenzene (C_6H_5Cl) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
42.3	-10.0
63.9	0.0
87.8	+10.0
100	16.30

Chlorobenzene (C_6H_5Cl) + Capric acid ($C_{10}H_{20}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
14.2	-10.0
30.0	0.0
51.8	+10.0
75.3	20.0
97.8	30.0
100	31.24

Chlorbenzene (C_6H_5Cl) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
2.0	-10.0
9.5	0.0
24.1	+10.0
46.5	20.0
70.5	30.0
93.1	40.0
100	43.92

Chlorbenzene (C_6H_5Cl) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.4	-10.0
2.0	0.0
6.7	+10.0
19.1	20.0
41.9	30.0
68.7	40.0
92.7	50.0
100	54.15

Chlorbenzene (C_6H_5Cl) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.1	0.1
1.6	10.0
7.2	20.0
20.4	30.0
43.3	40.0
69.7	50.0
100	62.82

Chlorbenzene (C_6H_5Cl) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.1	10.0
2.1	20.0
9.7	30.0
27.7	40.0
50.4	50.0
100	69.32

Chlorbenzene (C_6H_5Cl) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.
2.4	-40
5.8	-30
21.2	-20
46.0	-10
68.7	0
90.0	10

Brombenzene (C_6H_5Br) (b. t. = 156.1) + Acids
Lecat, 1949

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Formic acid	CH_2O_2	100.75	68	98.1	-
Acetic acid	$C_2H_4O_2$	118.1	95	118.0	-1.2 (90%)
Monochlor- acetic acid	$C_2H_3O_2Cl$	189.36	9.5	154.35	24 (9.5%)
Propionic acid	$C_3H_6O_2$	141.3	62.5	140.15	-0.2 (60%)
Butyric acid	$C_4H_8O_2$	164.0	18	152.2	+0.3 (20%)
Isobutyric acid	$C_4H_8O_2$	154.6	35	148.8	-0.4 (50%)
Valeric acid	$C_5H_{10}O_2$	186.35	3.5	155.65	-0.2 (5%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	8	154.75	-0.2 (10%)
Pyruvic acid	$C_3H_4O_3$	166.8	34	147.0	-1.0 (50%)

Brombenzene (C_6H_5Br) + Butyric acid ($C_4H_8O_2$)

Ryland, 1899

%	b. t.
0	152 - 153
19	147 - 148 (748mm) Az
100	159 - 160

Lecat, 1949

Iodobenzene (C_6H_5I) (b. t. = 188.45) + Acids

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	72	163.5	-
Isobutyric acid	$C_4H_8O_2$	154.6	82	154.2	-
Valeric acid	$C_5H_{10}O_2$	186.35	34	180.15	-1.0 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	48	173.0	-
Caproic acid	$C_6H_{12}O_2$	205.15	10	186.8	-
Isocaproic acid	$C_6H_{12}O_2$	199.5	15	185.5	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	36	175.3	-
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	20	184.3	-
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	23	184.8	-
l-Brompropionic acid	$C_3H_5O_2Br$	205.8	-	184.8	-

o-Dichlorbenzene ($C_6H_4Cl_2$) (b. t. = 179.5) + Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	65	163.0	-
Valeric acid	$C_5H_{10}O_2$	186.35	22	175.8	-
Isovaleric acid	$C_5H_{10}O_2$	176.5	42	171.2	-
Caproic acid	$C_6H_{12}O_2$	205.15	5	179.2	-
Isocaproic acid	$C_6H_{12}O_2$	199.5	6	178.5	-0.2 (6%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	28	171.3	-
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	16	177.0	-

p-Dichlorbenzene ($C_6H_4Cl_2$) (b. t. = 174.4) + Acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t
Butyric acid	$C_4H_8O_2$	164.0	57	162.0	22.0 (57%)
Valeric acid	$C_5H_{10}O_2$	186.35	14.7	171.7	47 (14.7%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	28	168.85	40 (28%)
Caproic acid	$C_6H_{12}O_2$	205.15	3.5	174.25	30 (3.5%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	2	174.2	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	24.5	167.7	-
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	13	172.8	-
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	10	174.1	-
l-Brompropionic acid	$C_3H_5O_2Br$	205.8	7	173.5	-

p-Dibrombenzene ($C_6H_4Br_2$) (b.t. = 220.25) +
Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Caproic acid	$C_6H_{12}O_2$	205.15	68	203.8	-
Heptanoic acid	$C_7H_{14}O_2$	222.0	30	215.5	-
Caprylic acid	$C_8H_{16}O_2$	238.5	7	219.5	-
Benzoic acid	$C_7H_6O_2$	250.8	3.8	219.5	-
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	7.5	186.3	61 (7.5%)
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	55	201.5	-

p-Chlorbrombenzene (C_6H_4ClBr) (b.t. = 196.4) +
Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	
Isovaleric acid	$C_5H_{10}O_2$	176.5	75	175.5	
Caproic acid	$C_6H_{12}O_2$	205.15	20	193.0	
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	35	175.0	
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	47	191.5	

Trichlorbenzene s. ($C_6H_3Cl_3$) + Caproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b.t.
0	208.4
42	201.0 Az
100	205.15

Trichlorbenzene s. ($C_6H_3Cl_3$) + Monochloracetic acid ($C_2H_3O_2Cl$)

Lecat, 1949

%	b.t.
0	208.4
72	185.0 Az
100	189.35

Benzylchloride (C_7H_7Cl) (b.t. = 179.3) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Butyric acid	$C_4H_8O_2$	164.0	58	161.8	-0.4 (80%)
Isobutyric acid	$C_4H_8O_2$	154.6	75	153.0	-2.2 (90%)
Valeric acid	$C_5H_{10}O_2$	186.35	25	175.0	-1.0 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	38	171.2	-1.2 (70%)
Caproic acid	$C_6H_{12}O_2$	205.15	5	178.7	-0.3 (5%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	8	178.0	-0.5 (10%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	23	173.5	32 (23%)
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	14	178.2	-

Benzylbromide (C_7H_7Br) (b.t. = 198.5) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Valeric acid	$C_5H_{10}O_2$	186.35	53	183.0	-1.2 (50%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	72	175.2	-1.2 (72%)
Caproic acid	$C_6H_{12}O_2$	205.15	25	194.0	-1.0 (25%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	32	193.0	-1.0 (30%)
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	-	183.5	-

Benzylidene chloride ($C_7H_6Cl_2$) + Monochloroacetic acid ($C_2H_3O_2Cl$)

Lecat, 1949

%	b.t.
0	205.2
97	189.1 Az
100	189.35

p-Chlortoluene (C_7H_7Cl) (b.t. = 162.4) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Formic acid	CH_2O_2	100.75	73	99.1	-
Propionic acid	$C_3H_6O_2$	141.3	77	140.8	-0.3 (90%)
Butyric acid	$C_4H_8O_2$	164.0	32	156.8	+0.1 (32%)
Isobutyric acid	$C_4H_8O_2$	154.6	47	150.5	-0.7 (50%)
Valeric acid	$C_5H_{10}O_2$	186.35	6	161.2	-
Isovaleric acid	$C_5H_{10}O_2$	176.5	15	160.0	-0.4 (15%)
Pyruvic acid	$C_3H_4O_3$	166.8	40	151.5	-
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	14	158.8	-

o-Chlortoluene (C_7H_7Cl) (b.t. = 159.2) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Propionic acid	$C_3H_6O_2$	141.3	68	140.2	-0.7 (68%)
Butyric acid	$C_4H_8O_2$	164.0	27	154.5	-
Isobutyric acid	$C_4H_8O_2$	154.6	42	149.5	-0.4 (42%)
Valeric acid	$C_5H_{10}O_2$	186.35	5	158.5	-0.2 (10%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	12	157.5	-0.3 (10%)
Pyruvic acid	$C_3H_4O_3$	166.8	37	149.5	-
Formic acid	CH_2O_2	100.75	72	98.5	-2.0 (90%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	12	156.2	-

o-Bromtoluene (C_7H_7Br) (b.t. = 181.5) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	72	168.0	-0.5
Valeric acid	$C_5H_{10}O_2$	186.35	23	176.8	-0.3 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	39.5	172.1	-0.5 (50%)
Caproic acid	$C_6H_{12}O_2$	205.15	6	181.0	-0.2 (5%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	9	180.5	-0.1 (5%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	31	173.0	-
Monobromoacetic acid	$C_2H_3O_2Br$	205.1	-	179.0	-
Trichloroacetic acid	$C_2HO_2Cl_3$	197.55	22	180.3	-
Brompropionic acid-1	$C_3H_5O_2Br$	205.8	12	179.0	-

m-Bromtoluene (C_7H_7Br) (b.t. = 184.3) + Acids
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyric acid	$C_4H_8O_2$	164.0	79.5	163.62	-0.4 (78%)
Valeric acid	$C_5H_{10}O_2$	186.35	25.5	178.55	-0.4 (25%)
Isovaleric acid	$C_5H_{10}O_2$	176.5	45	172.5	-0.5 (50%)
Isocaproic acid	$C_6H_{12}O_2$	199.5	10	183.0	-0.2 (10%)
Monochloroacetic acid	$C_2H_3O_2Cl$	189.35	32	174.5	-
Monobromoacetic acid	$C_2H_3O_2Br$	205.1	14	181.2	-

p-Bromtoluene (C_7H_7Br) + Acetic acid ($C_2H_4O_2$)

Paterno, 1895

%	b.t.
0	26.88
0.34	26.54
1.11	26.00
2.20	25.27
3.68	24.28
5.50	23.24
15.99	18.84
24.88	15.46

p-Bromtoluene (C_7H_7Br) (b.t. = 185.0) + Acids
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Butyric acid	$C_4H_8O_2$	164.0	78	163.5
Valeric acid	$C_5H_{10}O_2$	186.35	32	179.2
Isovaleric acid	$C_5H_{10}O_2$	176.5	48	173.0
Caproic acid	$C_6H_{12}O_2$	205.15	8	184.0
Isocaproic acid	$C_6H_{12}O_2$	199.5	12	183.0
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	35	175.0

p-Iodtoluene (C_7H_7I) (b.t. = 214.5) + Acids
Lecat, 1949

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Valeric acid	$C_5H_{10}O_2$	186.35	80	184.5
Caproic acid	$C_6H_{12}O_2$	205.15	50	202.2
Heptanoic acid	$C_7H_{14}O_2$	222.0	17	211.0
Monochlor-acetic acid	$C_2H_3O_2Cl$	189.35	78	184.8
Monobrom-acetic acid	$C_2H_3O_2Br$	205.1	54	198.0
Trichlor-acetic acid	$C_2HO_2Cl_3$	197.55	-	196.8

1-Chlornaphthalene ($C_{10}H_7Cl$) (b.t. = 262.7) + acids

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Pelargonic acid	$C_9H_{18}O_2$	254.0	50	252.5	-
Caprinic acid	$C_{10}H_{20}O_2$	268.8	12	261.5	-
Benzoic acid	$C_7H_6O_2$	250.8	57	247.9	95.5 (57%)
Phenyl acetic acid	$C_8H_8O_2$	266.5	30	255.9	36 (30%)

Bromnaphthalene (1+2) ($C_{10}H_7Br$) + Acetic acid
($C_2H_4O_2$)

Timmermans and Kohnstamm, 1909 - 1910

C.S.T.	limits of pressure (Kg)	dt/dp
42.4	5 - 210	+ 0.025

1-Bromnaphthalene ($C_{10}H_7Br$) + Phenyl acetic acid
($C_8H_8O_2$)

Lecat, 1949

%	b.t.	Sat.t.
0	281.2	
53.5	264.0 Az	55.3
100	266.5	

XXVII. CO_2 , CS_2 , etc... + HYDROXYL DERIVATIVES .Carbon dioxide (CO_2) + Methyl alcohol (CH_3O)

Stern, 1912

P Absorption coefficient cc/g
-78° -59°

50	194.0	-
100	195.0	63.0
200	202.9	64.2
400	221.5	66.3
500	-	-
700	-	69.0
740	260.0	--

Krichewskii and Lebedeva, 1947

P Absorption coefficient cc/g
0° 25° 49.8° 75°

1.0	8.13	4.33	3.11	-
6.8	59.5	29.9	19.5	12.8
10.7	94.9	49.3	32.1	22.3
16.5	17.4	82.5	51.8	35.5
22.3	27.0	118	71.9	48.6
30.0	-	197	112	71.5
39.7	-	287	161	103
49.4	-	-	228	140
55.2	-	-	269	-
59.1	-	-	-	181
68.8	-	-	-	234

Baume and Perrot, 1914

mol% f.t. mol% f.t.

100	- 95.4	35.2	- 99.7
95.1	-100	73.3	- 35.2
94.4	-100.4	77.9	- 37.2
91.1	-103.1	73.8	- 73.4
90.7	-103.1	71.4	- 77.5
90.2	-103.4	58.6	- 71.9
89.1	-105.4	64.9	- 59.3
87.1	-105.5	60.3	- 54.8
87.1	-105.7	62.6	- 55.1
		53.3	- 52.5

Francis, 1954

%	d
	26°
23.5	0.8250
26.5	0.8413
35	0.8480
60	0.8480
84	0.8203
100	0.7888

Carbon dioxide (CO_2) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Bohr, 1900

t absorpt.coef. cc/g t absorpt.coef. cc/g

-65	38.41	10	3.57
-25	8.75	15	3.25
-20	7.51	20	2.98
-15	6.59	25	2.76
-10	5.75	30	2.57
-5	5.01	35	2.41
0	4.44	40	2.20
5	3.96	45	2.01

Sander, 1912

P abs. P abs.
Kg/cm₂ Kg/cm₂

20°	35°
30	104.8
40	149.7
50	188.8
60	-
70	-
30	77.87
40	113.1
50	144.5
60	173.0
70	210.8

60°	100°
40	72.82
50	97.09
60	122.5
70	145.2
80	167.9
90	180.7
100	195.7
50	42.49
60	66.05
70	88.67
80	111.2
90	129.0
100	145.7
110	155.0
120	174.6
130	182.6
140	186.0

abs.= cc CO_2 absorbed in one cc of solution

Stern, 1912

P	absorption coefficient cc/g	
	-78°	-59°
100	111.8	40.85
200	115.7	41.0
400	123.8	42.35
700	138.6	-
740	-	44.15

Travers and Gwyer, 1905

Sublimation temperature: -78.23° (V+L+C)

Blümcke, 1887

%	d		
	4° 35 atm.	17° 55 atm.	25° 66 atm.
100	0.810	0.795	0.790
90	0.826	0.808	0.799
80	0.841	0.822	0.808
70	0.858	0.835	0.818
60	0.874	0.848	0.827
50	0.890	0.859	0.836
40	0.899	0.870	0.845
30	0.916	0.876	0.852
20	0.925	0.877	0.844
10	0.931	0.871	0.830
0	0.934	0.841	0.728

Carbon dioxide (CO₂) + Propyl alcohol (C₃H₈O)

Sander, 1912

P Kg/cm ²	abs	P Kg/cm ²	abs
20°			
20	56.16	40	122.1
30	86.62	50	174.6
35°			
20	40.00	60	159.9
30	64.08	70	228.2
40	98.16	80	269.6
50	122.8		
60°			
20	24.73	70	144.4
30	47.68	80	159.2
40	64.65	90	184.3
50	88.54	100	213.9
60	111.5		
100°			
40	26.50	60	74.51
50	54.19	70	92.17

abs = ccCO₂ absorbed in one cc of solution :

Buchner, 1906

%	sat. t.
36.5	-24
57.5	-30
Complete miscibility at 0°	

Carbon dioxide (CO₂) + Butyl alcohol (C₄H₁₀O)

Buchner, 1906

%	sat. t.
29.4	-19
38.3	-17
44.5	-20
C.S.T. : 35 % near -16°	

Carbon dioxide (CO₂) + Isobutyl alcohol
(C₄H₁₀O)

Buchner, 1906

C.S.T. : 51.5 % -22°

Carbon dioxide (CO₂) + Isoamyl alcohol (C₅H₁₂O)

Timmermans, 1894

C.S.T. : -30°

Carbon dioxide (CO₂) + Alcohols

Francis, 1954

2nd Comp.	L ₁	% L ₂
25°		
Heptyl alcohol (C ₇ H ₁₆ O)	62	62
2-Ethylhexanol (C ₈ H ₁₈ O)	47	17
Decyl alcohol (C ₁₀ H ₂₂ O)	70	1
Ethylene glycol (C ₂ H ₆ O ₂)	93	0.2
Propyleneglycol (C ₃ H ₈ O ₂)	90	0.5
Pinacol (C ₆ H ₁₄ O ₂)	77	2
Diethyleneglycol (C ₄ H ₁₀ O ₃)	90	1
Dipropylene glycol (C ₆ H ₁₄ O ₃)	85	2
Glycerol (C ₃ H ₈ O ₃)	93	0.05
Triethylene glycol (C ₆ H ₁₄ O ₄)	88	2
2-Hydroxyethyl acetate (C ₄ H ₈ O ₃)	50	17
Monoacetone (C ₅ H ₁₀ O ₄)	90	1
2-Chlorethanol (C ₂ H ₅ OCl)	60	10
2-Hydroxypropionitrile (C ₃ H ₅ ON)	70	1
Chloral hydrate (C ₂ H ₃ O ₂ Cl ₃)	-	2
Cyclohexanol (C ₆ H ₁₂ O)	80	4
p-Methylcyclohexanol (C ₇ H ₁₄ O)	80	4
Benzyl alcohol (C ₇ H ₈ O)	73	8
Phenylethanol (C ₈ H ₁₀ O)	85	3
Tetrahydrofurfuryl alcohol (C ₅ H ₁₀ O ₂)	80	3
Furfuryl alcohol (C ₅ H ₆ O ₂)	70	4

Carbon dioxide (CO₂) + Phenols

Francis, 1954

2nd Comp.	L ₁	L ₂
25°		
Phenol (C ₆ H ₆ O)	-	3
Resorcinol(C ₆ H ₆ O ₂)	-	0.1
o-Cresol (C ₇ H ₈ O)	70	2
m-Cresol (C ₇ H ₈ O)	80	4
p-Cresol (C ₇ H ₈ O)	70	2
Xylenol (C ₈ H ₁₀ O)	-	1
p-Ethylphenol (C ₈ H ₁₀ O)	92	1
Thymol (C ₁₀ H ₁₄ O)	59	9
Phenyl salicylate (C ₁₃ H ₁₀ O ₃)	62	9
Eugenol (C ₁₀ H ₁₂ O ₂)	62	10
Salicyl alc(C ₇ H ₆ O ₂)	-	0.1
Phenyl ethanolamine (C ₈ H ₁₁ ON)	85	1

Carbon dioxide (CO₂) + Borneol (C₁₀H₁₈O)

Buchner, 1906

C.V.T. saturated solution : 33°; under high pressure
re gaseous CO₂ dissolves at 70°, 3% borneol.Carbon dioxide (CO₂) + o-Nitrophenol (C₆H₅O₃N)

Scheffer and Smittenberg, 1933

t	P	t	P
C + L + V		L ₁ + L ₂ + V	
-2.0	31.9	25.9	61.1
+1.0	34.3	28.5	64.9
4.0	36.8	31.0	68.7
7.0	39.5	33.5	72.5
10.0	42.3	36.0	76.8
12.5	44.6	38.0	80.2
15.0	46.0	40.05	83.9
17.5	46.2	L ₁ = L ₂	
20.0	45.6		
22.5	43.9		
26.0	40.0		
31.0	32.5	25.9	61.1
37.0	20.5	26.1	61.9
		28.6	70.6
		31.5	80.4
44.8	0.0	34.3	89.7
Triple point		36.3	96.2

Timmermans and Kohnstamm, 1909 - 1910

C.S.T. = 24.8° dt/dp (80 - 124 atm.) = +0.30

Buchner, 1906

%	f. t.	sat. t.
1.9	-52	-
4.2	-8.5	-
8.4	+11.5	32.5
10.0	12.5	31
21.2	14	25
33.8	15	26
48.5	16	-
60.7	20	-
100	42	-

C.V.T. = 39°
C.V.T. = 39.5°
" "
" "

Carbon dioxide (CO ₂) + m-Nitrophenol (C ₆ H ₅ O ₃ N)							
Bayle, 1951							
%		t	P				
L ₁ = V							
2.95		39.2	82.9	65.2	139.2	38.8	82.0
1.02		34.8	77.25	60.2	129.9	38.6	81.85
0		31.1	72.95	55.05	119.7	38.45	81.45
		t	P				
L ₁ + L ₂ + V							
40.0	84.0 s	33.3	72.2	50.4	108.9	37.65	80.15
39.6	83.2	32.9	71.75	45.4	97.2	35.7	77.2
39.4	82.85	32.0	70.1	42.4	90.05	34.1	74.7
39.0	82.25	31.0	68.65	41.2	87.1	29.8	68.25
38.8	81.85	30.2	67.65	40.0	84.3	27.1	64.4
38.6	81.35	29.5	66.45	39.9	83.95	24.0	60.3
38.15	80.55	28.8	65.3	39.7	83.55	20.4	55.45
38.0	80.25	27.2	63.1	39.6	83.4	20.0	55.05
37.7	79.9	26.8	62.5	39.4	82.9	18.1	52.6
37.0	78.5	26.1	61.65	39.2	82.7		
36.6	77.9	26.0	61.5	60.6	144.1	37.0	80.0
35.8	76.55	25.8	61.25	55.6	132.4	36.0	77.25
35.1	75.45	25.7	61.1 i	50.9	120.0	35.8	76.8
34.4	74.1			50.8	119.8	35.65	76.3
s = C.S.T. sup.							
i = " inf.							
C + L + V							
44.6	m.t.	16.2	46.8	50.8	109.4	35.0	75.3
36.0	24.1	15.7	46.7	47.0	109.3	33.0	72.15
33.6	29.05	15.0	46.55	46.95	109.3	30.0	67.75
27.2	39.7	14.2	46.15	42.8	97.7	25.0	61.0
25.8	41.45	13.8	46.0	42.75	97.5	20.1	54.45
25.6	41.85	13.4	45.85	40.4	90.3	15.4	48.5
23.6	43.95	12.6	44.9	38.4	84.7		
23.1	44.2	11.8	44.05	57.05	135.8	39.3	87.45
22.0	45.0	11.6	43.95	56.8	135.3	37.5	81.9
21.0	45.65	9.8	42.05	49.2	115.5	36.2	78.2
19.9	46.15	9.5	41.85	44.2	102.0		
18.6	46.55	8.0	40.6	56.2	140.1	32.2	70.85
17.6	46.85	7.2	39.7	52.2	130.3	31.8	70.1
16.8	46.9	6.1	38.75	51.0	127.7	31.2	69.25
		t	P	48.4	120.4	31.0	69.05
1.02 %				45.8	113.3	30.8	69.75
43.2	87.1	34.4	76.75	42.4	103.0	30.4	68.2
42.0	85.3	33.4	75.3	39.8	95.2	27.2	63.65
39.4	81.95	32.4	73.8	37.4	87.5	25.0	60.7
38.2	80.85	31.4	72.4	35.4	81.2	20.6	54.9
37.7	80.4	30.4	71.0	33.2	74.2	15.4	48.45
36.8	79.5	28.0	67.3	60.2	160.9	28.65	65.75
36.0	78.5	25.2	63.4	60.1	160.7	28.6	65.65
35.0	77.5	20.6	57.0	57.0	153.2	28.4	64.75
34.8	77.25			53.8	144.8	27.9	64.05
2.95 %				49.0	130.6	25.9	61.55
60.2	121.2	39.2	82.9	46.6	123.7	22.6	57.1
54.9	112.6	39.0	82.65	44.0	116.0	21.2	55.2
54.7	112.2	38.6	81.95	41.4	107.6	18.2	51.4
49.6	102.6	38.0	81.0	39.0	100.1	15.35	48.0
45.1	94.2	37.0	79.65	36.8	92.65	13.0	45.4
44.8	93.6	35.4	77.25	34.0	83.55	11.0	43.2
40.6	85.25	32.35	72.7	29.6	69.1		
40.5	85.05	28.6	67.4	55.0	152.1	26.4	62.5
39.95	83.85	23.95	60.95	50.6	139.7	26.3	61.95
39.8	83.7	19.2	54.55	45.0	123.0	26.2	61.9
39.4	83.2			40.0	107.9	25.6	61.1
				36.0	94.5	25.3	60.6
				32.1	82.0	25.0	60.25
				32.0	81.45	23.9	58.25
				29.5	73.15	18.8	52.15
				27.4	65.6	15.2	47.75

CARBON DIOXIDE + CHLORPHENOL

35.4 %				Carbon dioxide (CO ₂) + m-Chlorphenol (C ₆ H ₅ OC1)			
				Buchner, 1906			
				Limited solubility			
				Quadruple point (L ₁ + L ₂ + C + V) = 20°			
				Carbon dioxide (CO ₂) + Picric acid (C ₆ H ₃ O ₇ N ₃)			
				De Gee, 1916			

C + L ₁ + L ₂				8.5 %			
16.0 q	145.5	16.0	60.6	48.8	149.2	17.6	57.6
15.95	89.1	16.0 q	50.0	44.7	138.2	16.4	53.1
16.05	70.7			40.4	126.5	16.2	51.9
C + L ₁ + V				36.55	115.6	15.5	49.6
16.0 q	50.0	10.4	44.0	33.3	106.3	15.3	49.1
15.6	49.5	10.3	43.8	29.0	93.0	14.8	48.55
15.2	49.1	20.0	47.3	24.8	79.85	13.9	47.6
14.55	48.35	18.9	48.1	22.8	74.0	13.4	46.9
13.8	47.6	17.0	49.7	21.0	68.6	12.4	45.8
12.0	45.7	16.0 q	50.0	19.6	63.7		
C + L ₂ + V				11.3 %			
40.55	m.t.	23.3	42.7	40.2	148.2	24.6	104.9
37.6	9.55	22.0	44.4	35.2	135.1	17.3	81.9
34.5	18.2	20.0	47.3	31.0	123.7	13.6	72.4
30.5	28.35	18.9	48.1	27.2	112.1	12.1	69.0
28.3	33.35	17.0	49.7	73.7 %			
24.0	41.4	16.0 q	50.0	49.2	135.7	21.0	65.4
s = C.S.T.	q = quadruple point .			44.0	123.3	17.8	57.1
t	P	t	P	39.0	111.4	15.8	51.9
0.97 %				33.8	98.9	14.9	49.9
41.0	87.55	34.2	76.5	29.0	86.2	13.9	47.5
39.8	85.65	33.8	76.15	24.2	73.3		
37.6	81.95	33.45	75.65	74.5 %			
37.4	81.6	33.15	75.15	49.3	126.7	23.0	59.65
35.6	78.55	30.95	71.75	44.0	113.8	22.6	58.9
34.75	77.15	25.0	63.15	39.2	102.3	22.4	58.5
34.7	77.1	17.4	52.75	35.1	91.5	22.0	57.75
34.5	76.85	15.0	49.90	31.2	80.25	21.2	56.6
1.87 %				28.0	72.1	20.0	54.9
51.0	109.7	34.8	77.25	26.0	67.0	17.35	51.5
46.3	100.4	34.6	76.9	24.2	62.1	16.2	49.85
42.6	93.0	34.0	76.05	75.9 %			
39.45	86.9	31.1	71.6	50.2	118.2	31.4	71.7
39.3	86.2	27.6	66.55	46.0	108.3	31.0	70.8
37.6	82.55	24.45	62.1	42.0	97.9	30.6	70.2
36.55	80.55	20.7	56.95	37.8	87.1	29.2	68.0
36.4	80.15	17.5	52.8	36.0	82.4	24.4	60.8
35.6	78.75	13.95	48.3	34.2	77.6	20.5	55.1
34.9	77.35			32.8	74.4	17.0	50.5
2.95 %				77.8 %			
50.55	115.8	32.8	73.85	50.0	105.6	29.1	65.3
47.7	109.9	32.4	73.15	45.9	96.5	24.4	59.0
44.0	101.2	31.4	71.7	41.4	86.6	20.4	54.0
39.6	90.4	27.8	66.4	37.7	79.8	17.6	50.4
36.8	83.45	24.6	61.75	34.1	73.3		
34.0	76.7	21.6	57.85	81.8 %			
33.15	74.5	18.3	53.4	50.5	88.45	31.1	60.8
33.0	74.0			46.6	82.45	25.6	54.3
3.95 %				41.6	75.1	20.6	48.85
49.6	120.2	30.35	69.8	36.3	67.7		
45.4	109.7	30.0	69.35	Carbon dioxide (CO ₂) + Acetic acid (C ₂ H ₄ O ₂)			
41.2	99.1	27.0	65.05	Francis, 1954			
37.6	89.7	24.0	60.85				
34.6	81.35	20.9	56.65				
32.0	74.7	18.6	54.75				
31.6	73.3	15.3	49.55				
31.05	71.8	13.8	47.8				
30.6	70.6	12.0	45.85				
30.5	70.1						
5.8 %							
49.4	130.5	25.7	63.35				
46.0	122.0	25.6	62.8				
42.0	111.4	25.4	62.55				
38.8	103.0	25.0	61.95				
35.45	93.5	22.5	58.45				
32.0	83.2	19.0	54.0				
28.0	70.75	15.4	49.5				
27.0	67.65						

Carbon dioxide (CO₂) + Acids

Francis, 1954

2nd Comp.		%	
		L ₁	L ₂
25°			
Lauric acid	C ₁₂ H ₂₄ O ₂	60	1
Oleic acid	C ₁₈ H ₃₄ O ₂	78	22
Lactic acid	C ₃ H ₆ O ₃	92	0.5
Chloracetic acid	C ₂ H ₃ O ₂ Cl	-	10
2-Chlorpropionic acid	C ₃ H ₅ O ₂ Cl	48	26
Phenylacetic acid	C ₈ H ₈ O ₂	-	0

Carbon disulfide (CS₂) + Methyl alcohol (CH₄)

Drucker, 1897

%		sat.t.	
53.42	13.02	16.70	40.27
47.45	24.77	10.97	39.19
38.58	33.12	8.86	37.75
28.64	39.57	5.27	33.45
23.12	40.50	2.82	23.23
19.25	40.69		

Rothmund, 1908

%		sat.t.	
58.65	1.68	15.51	39.92
53.02	13.80	13.56	39.87
50.10	18.62	7.59	36.35
47.13	22.40	3.81	25.82
37.06	34.29	2.32	16.10
33.97	36.32	1.64	8.27

Buchner and Prins, 1916

mol %		sat.t.	
8.1	21.8	42.4	37.4
14.1	30.8	50.8	35.3
21.2	35.9	52.9	34.7
24.4	37.4	61.0	28.7
29.4	37.1	72.8	11.2
34.6	37.2	81.0	15

Mc Kely and Simpson, 1922

%		sat.t.	
0.36	-18.85	27.15	+34.09
1.53	+ 6.46	29.87	33.35
4.73	26.50	35.88	30.70
5.26	28.00	38.97	28.60
6.45	30.58	39.47	27.34
6.60	31.08	50.07	13.80
9.78	33.80	58.71	- 4.43
11.57	34.82	71.22	-38.37
15.27	35.75	81.30	-73.60
16.11	35.63	93.61	-100.7
22.35	35.30		

Bingham, 1907

C.S.T. = 40.5°

Timmermans and Kohnstamm, 1909-1910

C.S.T. = 48.5° dt/dp (5 - 85 kg/cm) = +0.015

Krishnan, 1935

C.S.T. = 15 % 40°

Rousset, 1936

C.S.T. = 20 % 40.08°

Maryott, 1941

C.S.T. = 35.2°

Quantie, 1954

C.S.T. = 20 % 41.3°

Mc Kely and Simpson, 1922

%		f.t.	
0		-112	
triple point		- 99.6	
93.6		-100.7	
100		- 99.7	

Buchner and Prins, 1916								
t	P		t	P	t	P	t	P
21.4	307	0%	36.0	530	L ₁ + L ₂ + V			
24.3	344		37.2	550	0	154	22.0	410
25.0	357		38.3	573	8.6	227	26.0	484
26.5	376		40.4	616	9.6	239	26.3	491
28.9	414		43.2	676	10.1	245	28.2	523
29.5	420		43.6	685	12.8	272	29.0	550
32.4	467		44.8	715	13.0	280	29.4	556
33.3	480		46.5	761	14.8	303	31.0	588
					15.8	313	33.6	654
					18.3	345	34.1	668
		4.66 mol%			19.6	372	34.5	679
17.8	339		38.1	767	20.8	389	36.4	725
21.0	388		44.4	959	21.4	403	36.6	734
23.1	422		48.2	1092				
23.9	438		50.4	1176	Drucker and Weissbach, 1925			
28.8	536		52.4	1259	mol%	p	mol%	p
34.8	672				40°			
		11.72 mol%			0	617.6	72.17	813.4
34.4	669		41.9	883	2.47	794.3	90.3	656.0
38.2	767		46.1	1033	4.66	820.4	90.7	651.5
41.5	874		50.2	1190	11.72	825.2	93.1	567.8
		19.43 mol%			19.43	831.0	95.7	486.8
39.9	828		46.8	1072	26.4	833.7	100	259.4-260.5
43.2	936		50.0	1193	30.6	832.8		
		26.4 mol%			52.9	830.8		
40.2	841		45.8	1031				
41.0	865		48.3	1128	mol%	P	P ₁	P ₂
43.4	944		49.6	1178	L	V		
		30.66 mol%			38.9°			
39.8	826		46.8	1073	9.34	25.2	792	592.7
41.2	877		47.4	1090	61.1	28.8	797	568
42.5	915		47.9	1106	89.5	36.4	653	415.5
44.0	915		47.9	1106				109.3
46.0	1037		49.6	1179				229
		52.9 mol%						237.5
37.7	759		43.2	943				
38.6	792		43.6	954	Roberts and Mayer, 1941			
38.8	799		45.0	1001	mol%		mol%	
40.0	835		47.0	1075	L	V	L	V
42.0	896		50.0	1196	0°			
		72.17 mol%			95.54	39.8	37.2	20.2
17.2	333		39.2	790	84.9	25.0	29.5	20.2
22.6	416		44.9	975	70.4	20.8	29.5	20.2
27.4	507		45.1	979	69.7	20.8	20.8	19.2
32.8	626		50.0	1168	50.9	20.2	11.2	19.2
		90.3 mol%			49.2	20.2	6.1	18.6
0	128		34.0	526	44.2	20.2		
14.3	240		39.2	639				
18.6	289		45.4	798				
19.0	291		51.3	976				
19.4	296		54.6	1097				
27.2	405		58.3	1238				
27.8	416							
		100%						
33.4	188		53.5	463				
36.2	210		56.1	529				
42.3	280		58.6	590				
45.3	319		60.0	627				
48.0	370		64.6	760				
50.8	410							

Whatmough, 1902

t	σ L ₁	t	σ L ₂
18°			
10.1	26.97	10.80	27.16
20.2	26.00	20.1	26.16
29.8	24.99	29.4	25.09
38.8	24.24	38.8	24.24

Buchner, 1931

%	χ
100	-0.53
61	-0.60
3.5	-0.67
0	-0.68

Cherbov, 1935

%	t	Q vap
0	20	86.4
7.2 (sat.sol.)	20	105.2
68.8 (sat.sol.)	20	105.0
100	20	276.3
	40	273.5

Drucker and Weissbach, 1925

wt%	mol%	U cal/g	Q mix cal/100g cal/mole	
20°				
98.0	99.16	0.638	21.5	6.94
95.1	97.87	0.586	52.6	17.4
92.6	96.72	0.584	80.9	27.1
91.5	96.3	0.558	89.9	30.3
84.5	92.9	0.544	153	53.7
78.3	89.7	0.513	200	73
73.0	86.5	0.495	232	87.9
68.4	83.6	0.493	257	100.3
64.3	81.1	0.479	275	110.8
59.3	77.6	0.463	293	122.5
55.4	74.6	0.453	303	131
51.7	71.6	0.437	311	138
3.08	6.97	0.270	99.5	72.7
2.32	5.32	0.269	88.7	65.5
1.56	3.61	0.268	75.5	56.5
0.787	1.85	0.260	56.3	42.3
0.454	1.08	0.257	45.7	34.7
36°				
-	96.3	-	-	33.8
-	93.1	-	-	62.3
-	90.4	-	-	92.1

Carbon disulfide (CS₂) + Ethyl alcohol (C₂H₅O)
Heterogeneous equilibria.

Guthrie, 1878

%	sat.t.
5.06	-18.4
10.46	-14.4
15.11	-15.9
20.06	-16.1
34.89	-17.7
60.04	-20

1.818g + 1.9855g 17.6° dv = +0.02912 cc

1 vol + 1 vol 11° dv = 0.7278%

Q mix is negative

Mc Kelvey and Simpson, 1922

%	sat.t.	%	sat.t.
0.91	-108.04	23.75	-25.13
1.45	73.68	29.61	26.88
3.22	43.71	38.77	35.17
6.35	30.16	50.54	54.58
10.43	25.76	61.25	79.26
12.52	25.07	68.04	100.07
17.29	24.31	100.00	111.7 crit. t.

Schoorl and Regenbogen, 1922

vol%	sat.t.
2.0	-62
5.7	-42
9.1	-35
22.2	-24
28.5	"
43.0	"
57.0	-45
71.0	-75

Author	C.S.T.
Kuenen, 1897	-10.6°
Bingham, 1907	-14°
Vieth, 1929	-24.4° (25%)
Maryott, 1941	-23.5

Alluard, 1864

%	b. t.	
	725 mm	760 mm
0	44.7	47.7
66.67	46.1	48.1
80.00	49.1	51.0
83.33	55.1	57.2
85.71	59.1	61.0
88.88	62.1	64.0
92.31	65.7	67.5
95.24	70.0	71.5
96.77	72.6	74.1
98.36	75.5	77.0
99.01	77.06	78.5

Ryland, 1899

%	b. t.	
0	45.5 - 46	
9	41.5 - 42.5 (755mm)Az	
100	77.5 - 78	

Burwinkel, 1914

t	p					
	0%	16.54%	34.20%	50.77%	71.17%	100%
0	125	135	136	128	104	13
10	198	212	214	203	171	24
20	301	319	331	310	254	45
30	443	473	485	459	375	79
40	630	690	699	660	552	132
50	-	-	-	-	-	226
60	-	-	-	-	-	359
70	-	-	-	-	-	547

Properties of phases.

Landolt, 1865

%	t		d
100	22.1	0.7950	
87.2	21.5	0.8372	
28.4	22.0	1.1077	
0	22.0	1.2602	

Drecker, 1883

%	d					$\tau \cdot 10^7$
	0°	17.86°	28.21°	35.96°	25°	
0	1.29195	1.26569	1.25031	1.23863		12220
10.025	.21448	.18970	.17472	.16317		12710
20.141	.14725	.12384	.10964	.09874		12754
29.663	.09021	.06870	.05538	.04509		12601
40.604	.03237	.01213	0.99957	0.98987		12547
49.807	0.98873	0.96930	.95744	.94834		12345
60.073	.94342	.92630	.91515	.90659		12144
71.091	.90234	.88532	.87484	.86676		11948
79.976	.87137	.85519	.84523	.83758		11747
88.421	.84449	.82896	.81956	.81240		11401
100	.80760	.79603	.78722	.78052		11109

%	π		%	π	
0	97.5	25°	64.15	113.8	
18.54	103.0		74.89	115.0	
27.48	106.6		89.54	115.4	
40.32	109.3		100	113.8	
51.76	111.3				

Philip, 1897

%	d	
	18°	
100.0	0.799	
76.035	0.8716	
52.567	0.961	
26.378	1.091	
0	1.268	

Zecchini, 1897

%	d			
	1.8°	6.4°	6.8°	7.1°
0	1.28859	1.28142	-	-
23.50	-	-	1.11395	-
76.59	-	-	-	0.87133
77.66	0.87393	-	-	-
100	0.80513	-	0.80034	-

Holmes, 1906

%	d	
	15.5°	
100	0.7932	
64.81	0.9080	
48.78	0.9749	
23.50	1.1060	
14.07	1.1653	
8.42	1.2046	
0	1.2701	

Burwinkel, 1914

%	d
17°	
0	1.26818
16.542	1.15000
34.199	1.04394
50.769	0.96723
51.397	0.96234
71.172	0.89701
83.578	0.85762
100.00	0.79365

Springer and Roth, 1930

%	d
0°	
100	0.8058
74.36	0.8887
47.18	0.9979
26.5	1.1046
0	1.2803

Harms, 1938

mol%	d	
	6°	30°
0	1.28395	1.24819
0.948	1.27898	1.23304
1.917	1.27402	1.22805
3.841	2.26421	1.22836
5.888	1.25405	1.21827
10.695	1.23038	1.19509
16.955	1.19976	1.16521
21.187	1.17914	1.14523
26.714	1.15226	1.11914
33.185	1.12083	1.08869
38.223	1.09641	1.06511
45.796	1.05975	1.02972
53.036	1.02470	0.99589
81.505	0.88817	0.86436
93.925	0.82970	0.80809
94.851	0.82533	0.80389
96.606	0.81724	0.79609
97.805	0.81171	0.79081
98.996	0.80615	0.78543
100	0.80133	0.78080

Peel, Madgin and Briscoe, 1928

1 vol + 1 vol dv = 0.75%

Dunstan, 1904

%	η	%	η
25°			
100	1113	47.18	665.9
83.09	944.8	30.05	566.9
80.71	953.5	26.50	546.6
74.36	906.5	18.07	492.6
67.69	840.7	0	365.6
60.50	762.1		

Hirata, 1908

%	η
(alcohol = 1)	
25°	
99.21875	0.9971
98.4375	0.9910
96.875	0.9666
93.75	0.9326
87.5	0.8656
75	0.7491

Springer and Roth, 1930

%	η
(water = 1)	
100	1.0589
74.36	0.8674
47.18	0.6687
26.5	0.5249
0	0.4028

Landolt, 1865

%	t	n_D
20°		
100	22.1	1.3606
87.2	21.5	1.3844
28.4	22.0	1.5370
0	22.0	1.6267

Zecchini, 1897					Buchner, 1931 (fig.)			
% 1.8°		n _D 6.4°		6.8°	7.1°	%	χ by g	χ. by cc
0	1.64170	1.63789	-	-	-	100	-0.75	-0.58
23.50	-	-	1.54073	-	-	90	-0.71	-0.59
76.59	-	-	-	1.40550	-	80	-0.68	-0.59
77.66	1.40602	-	-	-	-	70	-0.66	-0.595
100	1.36879	-	1.36658	-	-	60	-0.64	-0.62
						50	-0.635	-0.635
						40	-0.63	-0.65
						30	-0.565	-0.65
						20	-0.545	-0.665
						10	-0.545	-0.665
						0	-0.54	-0.68
Philip, 1897					Huet, Philippe and Bono, 1953			
% 18°		ε			%	molar extinction coefficient	%	molar extinction coefficient
100.0			(26.8)		0.198	1.084	5.77	0.2248
76.035			22.56		0.487	0.903	11.5	0.152
52.567			17.14		0.673	0.830	20.1	0.1136
26.378			9.130		1.35	0.579	22.95	0.1102
0			2.598		1.65	0.509	39.95	0.086
					2.35	0.390	40.2	0.083
					4.7	0.2605		
Harms, 1938					Heat constants.			
mol%		ε			Drecker, 1883			
		6°	30°		% U (constant volume)			
					20°			
0	2.676 ₆	2.612 ₄			0	0.160		
0.948	2.717 ₇	2.658 ₇			10.025	0.207		
1.917	2.756 ₉	2.701 ₄			20.141	0.260		
3.841	2.861 ₉	2.799 ₁			29.663	0.298		
5.888	3.025 ₇	2.934 ₈			40.604	0.327		
10.695	3.595 ₈	3.381 ₉			49.807	0.352		
16.955	4.689 ₂	4.245 ₂			60.073	0.386		
21.187	5.590	4.930 ₃			71.091	0.418		
26.714	6.965	8.460			79.976	0.445		
33.185	8.676	7.246			88.421	0.475		
38.223	10.203	12.73			100	0.518		
45.796	12.57	10.627						
53.036	15.25	12.73						
81.505	23.47	20.25						
					Peel, Madgin and Briscoe, 1928			
					1 vol + 1 vol dt = -5.2°			

Schüller, 1871				Timofeev, 1905		
%	U	%	U	final	% initial	Q dil (mole alcohol)
room t.				0	3.8	-1345
0	0.2442	40.53	0.4237	3.8	7.3	-572
16.04	.3371	48.64	.4237	13.0	16.5	-282
20.06	.3560	59.30	.4808	16.5	20.0	-260
30.06	.3989	70.90	.5138	32.2	34.4	-185
35.00	.4133	100	.6019			
Beetz, 1879				Carbon disulfide (CS ₂) + Propyl alcohol (C ₃ H ₈ O)		
%	heat conductivity			Kuenen, 1897		
	6° - 14°	28° - 36°		C.S.T. = -52°		
0 (d=1.272)	513	738		Holmes, 1906		
- (d=0.804)	360	570		%	d	
100 (d=1.257)	386	655		15.5°		
Bussy and Buignet, 1864 - 1867				100	1.2701	
vol%	t	dt		90.93	1.2032	
50	21.90	-5.90		78.31	1.1232	
%	U			61.42	1.0332	
18.5°				40.80	0.9427	
0	0.2381			18.75	0.8636	
37.7	0.3903			0	0.8072	
100	0.5790			Holmes, 1915		
32.7%	Q mix = -2.312 cal/g			mol %	Dt (50cc) mix	
Winkelmann, 1873				15 - 16°		
%	U	Q mix (cal/g)		11.6	-4.8	
0°				20.0	-6.6	
0	0.2575	-		27.1	-7.2	
20	0.3474	-1.6512		27.6	-7.2	
30	0.3662	-2.0342		31.6	-7.6	
40	0.4058	-2.1744		31.1	-7.7	
50	0.4340	-2.1990		33.4	-7.6	
60	0.4558	-2.0804		43.3	-7.6	
70	0.4833	-1.7880		50.1	-7.0	
80	0.5164	-1.3114		66.9	-6.2	
90	0.5460	-0.7045				
100	0.57321	-				

Carbon disulfide (CS ₂) + Isopropyl alcohol (C ₃ H ₈ O)				Carbon disulfide (CS ₂) + Isobutyl alcohol (C ₄ H ₁₀ O)			
Ryland, 1899				Schwers, 1912			
%		b. t.		t	d	t	d
0		45.5 - 46		0%		15.803%	
9		43.5 - 44.5 Az		13.45	1.27348	11.3	1.16304
				22.60	1.25983	18.75	1.15392
				33.95	1.24283	31.7	1.13648
				30.008%		50.220%	
				13.9	1.07702	15.5	0.97919
				21.1	1.07718	30.7	0.96248
				34.2	1.06113		
				70.388%		100%	
				13.8	0.90118	16.25	0.80680
				32.4	0.88336	31.8	0.79423
						53.0	0.77651
						74.65	0.75829
de Kolossowsky and Theodorowitsch, 1935							
%		b. t.	Q vap	t	n		
0		46.25	-	red	D	blue	violet
-		44.85	88.44 cal/g	15.803%			
100		82.35	-	9.6	1.56877	1.57631	1.59630
				28.9	1.55461	1.56198	1.58130
				39.7	1.54632	1.55357	1.57260
				30.008%			
				8.3	1.52753	1.53380	1.54994
				25.2	1.51660	1.52266	1.53833
				33.6	1.51057	1.51664	1.53216
				50.220%			
				11.8	1.47802	1.48276	1.49445
				22.1	1.47223	1.47679	1.48184
				34.6	1.46497	1.46938	1.48076
				70.388%			
				9.5	1.44132	1.44470	1.45326
				22.4	1.43506	1.43825	1.44665
				28.8	1.43172	1.43496	1.44320
				100%			
				8.0	1.39814	1.39996	1.40496
				23.7	1.39192	1.39372	1.39868
				34.9	1.38733	1.38912	1.39403
				49.1	1.38137	1.38311	1.38798
				66.3	1.37398	1.37568	1.38045
				86.0	1.36529	1.36686	1.37138
				0%			
				6.85	1.62853	1.63816	1.66346
				20.9	1.61754	1.62694	1.65180
				34.5	1.60678	1.61588	1.64017
Carbon disulfide (CS ₂) + Butyl alcohol (C ₄ H ₁₀ O)							
Kuenen, 1897							
C.S.T. = -80°							
Tichacek, Kmak and Drickamer, 1956							
mol%		D therm					
		3°					
20		-6.5					
50		0					
80		+0.25					
Carbon disulfide (CS ₂) + tert. Butyl alcohol (C ₄ H ₁₀ O)							
Hoffmann, 1943							
N		molar extinction .10 ⁵					
		21.5°					
8.174		429					
3.921		699					
1.921		1115					
0.9691		1719					
0.4518		2705					
0.1434		4545					
0.0544		5280					

Schwers, 1912				
%	t	(α) _{magn}		
		5893 Å	5460 Å	4360 Å
0	15.6	2.7305	3.2693	3.843
	34.0	2.6483	3.1686	5.655
15.803	16.0	2.1915	2.6111	4.5634
50.080	15.7	1.4657	1.7333	2.9629
75.360	16.5	1.0924	1.2867	2.1639
100	16.1	0.8165	0.9582	1.5700
	55.2	0.7758	0.9100	1.4877
Tichacek, Kmak and Drickamer, 1956				
50 mol% thermal diffusion ratio at 8° = -0.93				
Carbon disulfide (CS ₂) + sec. Butyl alcohol				
(C ₄ H ₁₀ O)				
Roland, 1928				
mol%		P ₁		
0.32°				
0		128.5		
16.84		126.3		
27.46		123.8		
44.69		118.6		
77.73		84.9		
86.60		61.7		
20.34°				
0		300.3		
30.09		283.2		
46.35		265.5		
83.32		163.9		
92.29		117.1		
Veltmans, 1926				
%	d	(α) _D		
20°				
0	1.2629	0		
20	1.1193	3.33		
39.9	1.0053	6.52		
50	0.9652	7.81		
59	0.9321	8.98		
70.2	0.8944	10.32		
79.4	0.8655	11.38		
89.9	0.8347	12.60		
100	0.8069	13.87		

Carbon disulfide (CS ₂) + Ethyl malate (C ₈ H ₁₄ O ₅)				
Walden, 1906				
filter	α	c	α	c
18°				
red	-8.37	1	-7.92	1
green	-13.18	1.56	-12.30	1.55
violet	-17.67	2.09	-16.1	2.03
c = dispersion constant				
Carbon disulfide (CS ₂) + Menthol (C ₁₀ H ₂₀ O)				
Eggers, 1904				
%	t	ε		
0.0	19	2.65		
5.4	24	2.8		
11.5	24	3.25		
16.06	23.5	3.8		
22.1	24	4.2		
28.56	24	4.7		
Carbon disulfide (CS ₂) + Phenol (C ₆ H ₆ O)				
Weissenberger, Schuster and Schuler, 1924				
mol%	p	mol%	p	
15°				
57.1	195	33.3	226	
49.5	216	28.6	226	
44.5	224	25.0	227	
40.0	224	0.0	243.8	
mol%	σ	mol%	η	
15°				
57.1	30.26	57.1	2360	
49.5	29.38	50.0	1720	
44.5	28.65	46.5	1460	
40.0	28.06	40.0	1270	
33.3	27.55	33.3	1040	
25.0	27.33	25.0	899	
0.0	28.80	0.0	380	
Aumeras, Minangoy and al., 1953				
Infra-red spectra				

Carbon disulfide (CS ₂) + o-Cresol (C ₇ H ₈ O)				
Weissenberger, Schuster and Wojnoff, 1926				
mol%	p			
15°				
66.7	163			
50.0	209			
40.0	225			
33.3	233			
28.6	238			
25.0	241			
22.2	243			
mol%	η	σ		
(water = 1)				
66.7	4.14	0.454		
50.0	2.03	0.463		
40.0	1.12	0.410		
33.3	0.92	0.395		
28.6	0.80	0.391		
25.0	0.73	0.390		
22.2	0.66	0.398		
Aumeras, Minangoy and al., 1953				
Infra-red spectra				
Carbon disulfide (CS ₂) + Formic acid (CH ₂ O ₂)				
Lecat, 1949				
%		b. t.		
0	46.25		Az	
17	42.55			
100	100.75			
Carbon disulfide (CS ₂) + Acetic acid (C ₂ H ₄ O ₂)				
Pickering, 1893				
%		f. t.	%	f. t.
100	16.63	74.858	9.50	
98.123	15.76	71.179	8.96	
96.579	15.17	67.655	8.53	
94.467	14.32	64.525	8.31	
92.791	13.79	61.219	8.24	
90.778	13.07	55.530	8.11	
87.457	12.14	50.504	8.00	
83.112	11.06	47.626	7.94	
78.806	12.08			

Poppe, 1934 - 1935			
%	f. t.	%	f. t.
100	16.52	30.30	7.40
82.40	10.70	20.6	6.60
66.62	8.28	14.0	5.10
49.95	7.70	10.1	2.75
40.90	7.65	5.0	-4.50
C.S.T. = +4.2			
P	f. t.	C.S.T.	
40%			
59.75	8.0	4.39	
96.75	10.0	7.60	
122.50	10.50	8.50	
148.75	11.0	9.43	
256	13.3	-	
Bingham, 1907			
C.S.T. = -10°			
Jones, 1923			
%	Sat. t.		
19.6	0.5		
24.6	2.6		
42.7	3.9		
49.3	3.9		
56.1	2.0		
66.1	-5.2		
Schwers, 1912			
t	d	t	d
0%			
13.45	1.27348	13.5	1.22831
22.6	1.25983	20.6	1.21786
33.95	1.24283	30.8	1.20261
12.076%			
14.7	1.10562	13.0	1.09426
22.7	1.09475	20.7	1.08520
30.7	1.08355	30.1	1.07395
61.284%			
80.298%			
100%			
12.5	1.05819		
23.9	1.04546		
30.4	1.03797		

t	n			
	red	D	blue	violet
0%				
6.85	1.62583	1.63816	1.66346	1.68620
20.9	1.61754	1.62694	1.65180	1.67436
34.5	1.60678	1.61588	1.64017	1.66225
12.076%				
11.9	1.57917	1.58723	1.60856	-
23.1	1.57066	1.57854	1.59962	1.61862
44.3	1.55416	1.56172	1.58211	1.60047
61.284%				
13.9	1.44279	1.44695	1.45740	1.46636
21.1	1.43875	1.44281	1.45321	1.46211
35.0	1.43065	1.43461	1.44470	1.45340
80.298%				
11.5	1.40555	1.40855	1.41614	1.42215
23.0	1.40111	1.40300	1.41035	1.41617
41.2	1.39132	1.39424	1.40130	1.40698
100%				
21.2	1.36949	1.37146	1.37621	1.37952
31.7	1.36542	1.36738	1.37209	1.37536
49.7	1.35818	1.36014	1.36476	1.36798
(α) magn.				
%	t	5893 Å	5460 Å	4360 Å
0	15.6	2.7305	3.2693	5.843
	34.0	2.6488	3.1686	5.655
12.076	15.2	2.3154	2.7596	4.8601
50.354	15.5	1.4431	1.7117	2.9303
61.284	16.8	1.2503	1.4820	2.5171
77.605	16	0.9894	1.1695	1.9648
100	15.2	0.6675	0.7838	1.2836
	32.0	0.6568	0.7712	1.2625

Carbon disulfide (CS₂) + Butyric acid (C₄H₈O₂)

Weissenberger, Henke and Katschinka, 1926

mol%	n _D
20°	
75	125.2
60	181.0
50	212.9
40	241.4
25	266.7
0	298.0

Carbon disulfide (CS₂) + Isobutyric acid
(C₄H₈O₂)

Schwers, 1912

t	d	t	d
0%		20.336%	
13.45	1.27348	13.35	1.18353
22.6	1.25983	22.7	1.17067
33.95	1.24283	30.1	1.15993
45.276%		68.028%	
12.4	1.09615	13.1	1.03144
21.1	1.08550	20.4	1.02316
31.0	1.07236	28.2	1.01398
100%			
11.4	0.96211	53.2	0.91978
34.2	0.93921	74.4	0.89795

%	(α) magn.			
t	5893 Å	5460 Å	4360 Å	
0	15.6 34.0	2.7305 2.6483	3.2693 3.1686	5.843 5.655
20.336	14.5	2.1022	2.5097	4.3735
45.276	14.6	1.5570	1.8279	3.1586
49.112	14.9	1.4908	1.7599	3.0113
100	15.0 31.8	0.732 0.719	0.8530 0.8376	1.412 1.386

t	n _D	red	blue	violet
0%				
6.85	1.62583	1.63816	1.66346	1.68620
20.9	1.61754	1.62694	1.65180	1.67436
34.5	1.60678	1.61588	1.64017	1.66225
20.336%				
11.75	1.55726	1.56445	1.58365	1.60070
19.5	1.55182	1.55908	1.57792	1.59495
34.5	1.54080	1.54810	1.56651	1.58325
45.276%				
11.2	1.49173	1.49687	1.51025	1.52292
18.2	1.48758	1.49253	1.50579	1.51835
30.8	1.47988	1.48470	1.49783	1.51000
68.028%				
13.2	1.44464	1.44813	1.45749	1.46663
18.45	1.44178	1.44515	1.45460	1.46356
38.0	1.43136	1.43480	1.44395	1.45274
100%				
9.05	1.39491	1.39689	1.40170	1.40674
25.9	1.38782	1.38973	1.39446	1.39940
39.4	1.38210	1.38394	1.38860	1.39346
68.4	1.36967	1.37145	1.37598	1.38064

Carbon disulfide (CS₂) + Isovaleric acid
(C₅H₁₀O₂)

Schwers, 1912

%	t	(α) ^o magn.	5893 Å	5460 Å	4360 Å
0	15.6	2.7305	3.2693	5.843	
	34.0	2.6483	3.1686	5.655	
32.725	15.8	1.8244	2.1705	3.7628	
46.203	16.4	1.5568	1.8494	3.1907	
50.099	15.4	1.4952	1.7704	3.0392	
63.543	17.1	1.2706	1.5063	2.5585	
100	33.9	0.7628	0.8958	1.4932	
	15.0	0.7788	0.9155	1.4568	

t	d	t	d
0%		28.295%	
13.45	1.27348	12.15	1.14718
22.6	1.25983	20.7	1.13613
33.95	1.24283	30.7	1.12267
45.900%		62.573%	
14.2	1.08096	10.2	1.03281
22.3	1.07130	19.7	1.02326
31.2	1.06044	30.7	1.01100
100%			
17.6	0.93319	60.8	0.89222
40.2	0.91204		

t	red	n	blue	violet
0%				
6.85	1.62583	1.63816	1.66346	1.68620
20.9	1.61754	1.62694	1.65180	1.67436
34.5	1.60678	1.61588	1.64017	1.66225
28.295%				
9.5	1.53953	1.54626	1.56353	1.57872
20.3	1.53254	1.53891	1.55571	1.57084
32.0	1.52466	1.53095	1.54755	1.56253
45.900%				
8.0	1.49817	1.50346	1.51683	1.52851
19.8	1.49131	1.49639	1.50947	1.52098
26.6	1.48709	1.49213	1.50509	1.51673
62.573%				
11.2	1.46271	1.46666	1.47695	1.48583
20.5	1.45754	1.46158	1.47161	1.48051
37.7	1.44841	1.45234	1.46210	1.47066
100%				
8.1	1.40524	1.40736	1.41231	1.41770
28.3	1.39604	1.39888	1.40369	1.40905
41.9	1.39121	1.39322	1.39830	1.40318
57.0	1.38499	1.38694	1.39185	1.39667

Carbon disulfide (CS₂) + Oleic acid (C₁₈H₃₄O₂)

Campbell, 1915

%	p	%	p
30°			
0	0	34.77	290.5
3.12	40.9	40.51	316.3
15.75	164.0	56.14	366.6
25.85	233.7	100	431.9

J. OXYGEN DERIVATIVES + HYDROXYL DERIVATIVES .

XXVIII. ETHER OXIDES + HYDROXYL DERIVATIVES .

Methylpropyl ether (C₄H₁₀O) + Methyl alcohol (CH₃O)

Lecat, 1949

%	b. t.	Dt mix
0	38.95	-
9	38.85	Az
10	-	-0.6
100	64.65	-

Bouillon, 1950

%	b. t. (743mm)	n _D ²⁰
0	39	-
11.94	38 Az	1.3549

Methylbutyl ether (C₅H₁₂O) + Methyl alcohol (CH₃O)

Bouillon, 1950

%	b. t. (743mm)	n _D ²⁰
0	71	-
33.35	56.3 Az	1.3600

Methyl tert. butyl ether (C₅H₁₂O) + Methyl alcohol (CH₃O)

Lecat, 1949

%	b. t.
0	50
15	52.6 Az
100	64.65

Methyl tert. amyl ether (C₆H₁₄O) + Methyl alcohol (CH₃O)

Lecat, 1949

%	b. t.
0	86
50	62.3 Az
100	64.65

t	d	t	d
0%		28.295%	
13.45	1.27348	12.15	1.14718
22.6	1.25983	20.7	1.13613
33.95	1.24283	30.7	1.12267
45.900%		62.573%	
14.2	1.08096	10.2	1.03281
22.3	1.07130	19.7	1.02326
31.2	1.06044	30.7	1.01100
100%			
17.6	0.93319	60.8	0.89222
40.2	0.91204		

t	red	n	blue	violet
0%				
6.85	1.62583	1.63816	1.66346	1.68620
20.9	1.61754	1.62694	1.65180	1.67436
34.5	1.60678	1.61588	1.64017	1.66225
28.295%				
9.5	1.53953	1.54626	1.56353	1.57872
20.3	1.53254	1.53891	1.55571	1.57084
32.0	1.52466	1.53095	1.54755	1.56253
45.900%				
8.0	1.49817	1.50346	1.51683	1.52851
19.8	1.49131	1.49639	1.50947	1.52098
26.6	1.48709	1.49213	1.50509	1.51673
62.573%				
11.2	1.46271	1.46666	1.47695	1.48583
20.5	1.45754	1.46158	1.47161	1.48051
37.7	1.44841	1.45234	1.46210	1.47066
100%				
8.1	1.40524	1.40736	1.41231	1.41770
28.3	1.39604	1.39888	1.40369	1.40905
41.9	1.39121	1.39322	1.39830	1.40318
57.0	1.38499	1.38694	1.39185	1.39667

Carbon disulfide (CS₂) + Oleic acid (C₁₈H₃₄O₂)

Campbell, 1915

%	p	%	p
30°			
0	0	34.77	290.5
3.12	40.9	40.51	316.3
15.75	164.0	56.14	366.6
25.85	233.7	100	431.9

J. OXYGEN DERIVATIVES + HYDROXYL DERIVATIVES .

XXVIII. ETHER OXIDES + HYDROXYL DERIVATIVES .

Methylpropyl ether (C₄H₁₀O) + Methyl alcohol (CH₃O)

Lecat, 1949

Ethyl ether ($C_4H_{10}O$) + Methyl alcohol (CH_3O)

Haywood, 1899

%	b.t.	%	b.t.
765.2mm			
100	65.15	39.1	40.1
85.3	57.7	36.5	39.55
70.4	50.2	36.2	39.42
63.1	47.1	30.7	38.5
56.2	44.7	18.4	36.6
49.7	42.7	0.0	34.85
44.5	41.4		

Pettit, 1899

%	b.t.	%	b.t.
738.7mm			
100.0	64.94	51.1	42.50
92.2	60.62	42.3	39.90
85.0	56.31	22.9	36.65
65.3	47.18	16.4	35.65
59.4	44.00	8.8	34.70
52.5	42.92	0.0	34.21

Centnerszwer and Zoppi, 1906

%	D b.t.	%	D b.t.
0	0	7.8	0.460
0.34	-0.035	9.9	.605
0.97	-0.080	11.5	.815
1.6	-0.100	12.6	.935
2.8	-0.065	19.2	1.800
3.6	-0.035	30.6	3.465
5.1	+0.100	32.4	3.770
5.7	0.150		

Schmidt, 1891

%	C.V.T.
0	193.5
22.83	200.4
45.67	212.1
52.97	216.2
100	241.9

Centnerszwer and Zoppi, 1906

mol%	C.V.T.	mol%	C.V.T.
0	194.0	69.7	212.9
7.7	194.1	91.2	230.5
10.6	193.9	95.1	234.9
15.2	194.4	100	240.2
35.6	197.9		

Saggir, 1930

%	f.t.		E	
	stable	metast.	stable	metast.
0	-116.4	-123.4	-	-
6.2	-118.0	-125.0	-	-
9.6	-118.7	-125.7	-119.5	-
10.5	-118.9	-125.7	-119.5	-
15.4	-119.0	-125.5	-	-
22	-	-	-	-126.1
31.5	-121.2	-123.0	-	-125.2
42.9	-119.6	-	-	-126.1
50.1	-117.4	-	-	-124.2
62.8	-113.4	-	-	-
81.5	-106.6	-	-	-
81	-106.3	-	-	-
100	-97.8	-	-	-

Pfalzer and Nikka, 1914

Vapour phase .

%	d (at b.t.) g/l	%	d (at b.t.) g/l
100	1.147	40.0	1.787
90.0	1.195	29.9	1.998
79.6	1.290	20.0	2.222
70.0	1.450	10.0	2.585
60.0	1.577	0	2.977
50.0	1.673		

Liquid phase .

Centnerszwer and Zoppi, 1906

%	d	%	d
25°			
0	0.707	52.9	0.755
11.2	.720	61.5	.762
22.2	.731	72.9	.770
31.2	.737	81.8	.776
33.1	.741	90.9	.783
42.0	.746	100.0	.788

Hirobe, 1908

mol%	d	mol%	d
25.1°			
0	0.70808	71.007	0.75665
21.734	.72041	82.214	.76715
31.972	.72659	92.585	.77922
55.824	.74293	100	.78939

Baker, 1912

%	d	η
25°		
100	0.7880	550.6
76.88	.7731	473.4
64.93	.7648	429.6
52.60	.7559	384.6
39.77	.7457	337.8
26.92	.7349	295.3
13.67	.7226	255.3
0	.7075	226.0

Hirobe, 1908

mol%	Q mix.	mol%	Q mix.
25.1°			
21.734	- 99.9	71.007	- 61.4
31.972	- 119.9	82.214	- 36.6
55.824	- 97.9	92.585	- 11.6
63.864	- 80.2	100	-

Ether ($C_4H_{10}O$) + Ethyl alcohol (C_2H_6O)

Heterogeneous equilibria.

Wullner, 1866

t	p				
	100%	50%	33.4%	20%	0%
7.2	20.3	183.0	215.0	231.6	260
10.3	-	207.0	243.1	262.1	-
13.6	-	235.8	275.5	296.5	-
16.2	35.05	261.6	305.0	329.9	380
18.6	-	283.8	331.9	358.1	-
21.1	-	322.5	373.7	401.2	-
23.2	-	353.8	405.6	435.3	-
25.5	60.8	392.7	448.2	478.0	530
28.0	-	-	492.1	527.1	-
31.4	-	-	567.9	675.3	-
34.6	-	-	-	-	-

Loudier, Briggs and Browne, 1924

t	p					
	100%	89.95%	79.23%	69.91%	60%	50%
0.0	12.41	43.3	70.9	93.7	111.8	126.7
5.0	17.31	54.6	90.2	118.1	139.5	158.5
10.0	24.34	70.1	114.4	147.2	175.0	197.4
15.0	33.22	89.2	144.5	182.1	225.5	247.9
20.0	44.40	112.4	174.0	224.8	268.1	302.7
25.0	59.7	140.7	214.2	274.0	324.5	367.8
30.0	79.3	174.8	262.9	333.9	395.3	446.2
35.0	103.1	217.3	318.5	403.7	476.7	541.5
40.0	134.6	266.3	386.6	481.2	571.0	662.1
45.0	173.3	327.4	467.1	582.0	679.2	804.6
50.0	221.1	400.3	558.1	693.1	804.6	903.5

t	p				
	39.93%	30.46%	19.93%	9.97%	0%
0.0	141.1	151.7	160.8	172.0	105.3
5.0	178.1	190.5	203.6	217.0	233.2
10.0	221.7	236.8	253.9	271.7	291.7
15.0	271.2	293.6	314.4	335.7	360.7
20.0	332.9	359.2	384.4	410.8	442.2
25.0	405.2	436.1	467.5	499.3	537.0
30.0	491.7	529.2	566.9	604.4	647.3
35.0	590.6	632.1	681.7	726.2	775.5
40.0	708.6	758.0	812.2	865.8	921.3
45.0	842.8	901.0	965.2	1025.8	1089.8
50.0	995.0	1002.7	1136.0	1208.4	1276.4

Desmaroux, 1931

mol%	P ₁	P ₂	mol%	P ₁	P ₂
20°					
100	-	41.1	26.3	360	22.4
90.0	103	39.8	20.3	377	19.6
80.0	179	36.2	10.9	402	14.2
64.0	261	30.6	0	436	-
47.0	365	29.8			

Desmaroux, 1928

mol%				
L	V	P ₁	P ₂	
0°				
0	0	185.9	-	
10.07	2.30	168.5	4.0	
20.37	3.90	160.2	6.4	
20.66	2.68	159.3	4.4	
30.96	4.52	158.4	7.6	
32.45	4.50	150.0	7.1	
40.62	5.22	139.4	7.7	
45.86	6.10	132.8	8.4	
50.33	6.12	128.4	8.6	
55.25	6.90	117.5	9.5	
55.40	6.35	111.7	8.7	
60.22	7.20	93.8	9.4	
65.76	7.96	88.1	9.6	
65.97	9.10	78.1	9.4	
75.81	10.25	59.2	10.2	
80.13	12.20	42.9	10.7	
84.82	14.61	46.8	11.1	
89.76	19.70	44.6	10.5	
89.89	21.25	21.9	12.7	
90.02	19.99	-	11.1	
94.97	33.61	-	11.1	
100	100	-	10.5	
		129.1	11.9	

Haywood, 1899

%	b.t.	p	%	b.t.	p
100.0	79.0	772.1	49.2	45.7	771.4
86.4	67.5	772.1	43.1	43.95	771.4
74.8	58.5	772.0	36.4	42.3	771.3
64.0	54.2	772.0	25.1	39.9	771.3
57.5	49.5	771.8	11.8	37.5	771.3
54.3	47.3	771.4	0.0	35.05	771.3

Nagai and Isu, 1935

mol%						
	0°	10°	P ₁		40°	50°
100	0	0	0	0	0	0
95	25.0	36.5	55.6	78.4	109.9	153.0
90	46.1	71.1	104.8	151.0	208.2	285
85	65.6	100.4	146.1	210.3	292.1	393
80	80.5	122.4	181.4	259.2	362.0	491
75	92.9	141.9	211.5	302.1	423.2	574
70	103.4	158.7	237.4	329.3	475.1	646
65	112.5	172.7	259.0	371.4	520.0	709
60	120.5	185.7	277.2	399.3	560.3	767
55	128.0	198.6	293.7	425.3	598.6	822
50	135.0	209.1	309.1	448.5	632.9	868
45	140.9	217.2	323.5	469.5	661.3	909
40	145.6	224.2	336.8	488.4	687.7	946
35	149.5	231.6	349.0	505.7	713.2	984
30	153.2	239.4	359.4	532.3	738.8	1020
25	157.2	247.5	369.9	541.2	765.1	1059
20	161.9	255.7	381.6	558.6	792.4	1097
15	167.2	263.5	394.8	577.0	819.8	1136
10	172.6	271.6	408.6	597.0	849.4	1177
5	178.4	280.6	423.8	619.2	881.8	1221
0	185.3	291.7	442.6	647.3	921.3	1276.4

mol%

P₂

0° 10° 20° 30° 40° 50°

100	12.14	24.34	44.40	79.30	134.6	221.1
95	11.83	23.17	42.77	75.56	128.1	211.0
90	11.28	22.00	40.27	72.00	122.1	201.1
85	10.76	21.01	38.41	68.70	116.4	191.6
80	10.29	20.15	36.71	65.75	111.2	183.0
75	9.87	19.32	35.12	62.86	106.3	174.8
70	9.49	18.53	33.61	60.18	101.9	167.0
65	9.11	17.75	32.23	57.64	97.6	159.8
60	8.74	17.00	30.48	55.20	93.4	152.6
55	8.36	16.21	29.70	52.72	89.0	145.5
50	7.97	15.47	28.38	50.24	84.7	138.8
45	7.61	14.81	27.00	47.74	80.7	132.0
40	7.28	14.20	25.57	45.20	76.6	124.7
35	6.96	13.46	24.15	42.60	72.0	116.8
30	6.62	12.57	22.71	39.70	67.1	108.3
25	6.16	11.50	21.07	36.32	61.4	98.4
20	5.56	10.28	18.85	32.40	54.4	86.6
15	4.80	8.85	16.02	27.80	46.2	73.0
10	3.82	7.10	12.45	21.60	35.6	56.3
5	2.50	4.53	7.70	13.35	21.5	34.2
0	0	0	0	0	0	0

Moeller, Englund and al., 1951

b.t.	%		b.t.	%	
	L	V		L	V
1.84 atm.			4.08 atm.		
104.5	98.8	76.6	109.4	93.9	69.2
103.6	98.6	79.7	106.0	84	50.1
100.0	96	65.4	104.5	72.3	36.1
92.3	87.7	45	103.5	70.4	35.7
87.7	81.1	36.2	101.0	63.6	31.7
86.5	80.3	35.6	97.9	57.6	26.3
82.3	70.7	26.3	93.9	44.2	19.4
75.0	48	15	93.7	37.4	16.2
74.9	47.1	15.8	91.0	12.6	3.8
73.8	42.8	14.5	90.0	3.4	1.0
70.5	25.9	8			
69.0	9	2.5			
6.12 atm.			8.50 atm.		
127.0	90	65	144.8	96.3	88.9
123.2	82.1	52.5	137.4	86.2	63.4
122.5	80	52.6	131.5	75.2	51.4
113.0	58.8	33.3	127.5	66.0	42.6
111.5	55.4	31.5	125.0	55.4	34.5
110.0	52.2	29.1	122.0	43.4	27.7
107.9	43.4	23.7	118.8	17.3	11.1
107.0	32.4	16.5	118.2	8.8	5.9
106.0	19.3	10.5			
105.0	4.3	2.0			

Strauss, 1880

%	C.V.T.		%	C.V.T.	
0	195.5	72.7		227.5	
15.2	202.8	83.9		233.9	
27.8	208.8	96.5		239.9	
52.8	218.8	100		240.6	

Desmaroux, 1928					
mol%	f.t.	mol%	f.t.		
100	-112.7	37	-117.5		
90	-117.7	33	-118.5		
80	-120.0	30	-117.0		
73	-122.8	28	-115.6		
67	-124.9	20	-117.8		
63	-123.0	18	-116.7		
60	-121.8	16	-114.8		
55	-120.0	13	-116.0		
53	-118.9	10	-116.9		
50	-118.0	5	-115.4		
47	-118.6	0	-114.0		
43	-119.1				
Sapgir, 1929					
%	f.t.		E		
	stable	metast.	stable	metast.	
0	-116.4	-123.4	-	-	
20.9	-119.1	-126.0	-125.8	-	
43.7	-122.2	-	-125.4	-128.5	
60.8	-	-126.6	-125.6	-128.1	
73.9	-122.6	-	-	-	
84.5	-119.3	-	-	-	
100	-114.1	-	-	-	
Lalande, 1934					
%	mol%	f.t.	%	mol%	f.t.
0	0	-116.3	49.2	60.9	-123.0
2.0	3.3	-117.0	55.4	66.6	-124.8
4.0	6.2	-117.3	57.8	68.3	-125.0E
7.4	11.4	-117.7	59.9	70.6	-124.3
13.5	20.1	-118.3	64.4	74.4	-123.3
16.5	24.1	-118.6	69.2	78.3	-122.5
22.1	31.3	-119.2	72.0	80.5	-121.5
25.1	35.1	-119.3	80.2	86.7	-119.5
31.3	42.3	-120.9	85.2	90.2	-118.3
32.8	43.9	-120.3	87.1	91.6	-117.6
39.2	51.0	-121.3	100.0	100.0	-114.5
45.9	57.7	-122.4			
Properties of phases .					
Pfaler and Nikka, 1914					
%	g/l(at b.t.)		%	g/l(at b.t.)	
	in vap.- phase			in vap.- phase	
760 mm					
100.0	1.534		40.0	2.087	
90.0	1.652		29.9	2.366	
79.6	1.757		20.0	2.460	
69.8	1.818		10.0	2.806	
59.9	1.916		0	2.977	
50.0	2.029				

Ramsay and Young, 1887				
spec.vol.				
t	1.500mm	5.000mm	10.000mm	15.000mm
63 mol%				
20	1.320	1.319	1.318	1.317
30	.336	.335	.334	.332
40	.354	.352	.351	.3495
50	.3725	.371	.369	.368
60	.393	.3915	.389	.387
70	.416	.413	.410	.408
80	-	.436	.433	.4305
90	-	.462	.458	.4555
100	-	.4895	.4855	.482
110	-	.520	.516	.5115
120	-	-	.5495	.545
130	-	-	.5875	.582
140	-	-	.631	.624
150	-	-	-	.672
160	-	-	-	.732
spec.vol.				
t	20.000mm	25.000mm	30.000mm	
20	1.316	1.314	1.313	
30	.331	.330	.3285	
40	.348	.3465	.345	
50	.366	.364	.362	
60	.3855	.3835	.381	
70	.406	.402	.4015	
80	.428	.426	.4235	
90	.452	.4495	.447	
100	.4735	.4755	.4725	
110	.508	.504	.501	
120	.5405	.536	.5325	
130	.5775	.571	.5675	
140	.6195	.6115	.606	
150	.666	.658	.6505	
160	.723	.712	.7025	
170	.792	.778	.765	
180	-	.860	.840	
190	-	.980	.949	
spec.vol.				
t	35.000mm	40.000mm	42.500mm	45.000mm
20	1.312	1.311	1.311	1.311
30	.327	.3265	.326	.3255
40	.3435	.3425	.342	.341
50	.361	.360	.359	.358
60	.380	.3785	.378	.3765
70	.400	.398	.397	.396
80	.421	.420	.418	.417
90	.4445	.4425	.441	.440
100	.470	.468	.466	.465
110	.4985	.496	.494	.492
120	.530	.526	.524	.522
130	.564	.559	.5565	.554
140	.6015	.596	.593	.590
150	.6445	.638	.634	.631
160	.694	.685	.6815	.678
170	.752	.741	.735	.732
180	.826	.810	.803	.7965
190	.920	.8965	.888	.878
200	2.055	2.014	.996	.980
210	.305	.193	2.157	2.128
220	-	.775	.516	.405

t	spec. vol.		
	47.500mm	50.000mm	55.000mm
20	1.310	1.310	1.310
30	.325	.324	.3235
40	.340	.3395	.3385
50	.357	.356	.3545
60	.3755	.374	.372
70	.395	.3935	.3915
80	.416	.414	.412
90	.4384	.437	.434
100	.4635	.4615	.459
110	.490	.488	.485
120	.520	.517	.514
130	.552	.549	.545
140	.588	.585	.580
150	.6285	.624	.619
160	.674	.670	.6635
170	.729	.724	.715
180	.7905	.784	.771
190	.869	.860	.841
200	.967	.954	.933
210	2.101	2.080	2.051
220	.334	.283	.210
230	.960	.711	.444

Liquid phase .

Schiff, 1859

%	d
at room t.	
0	0.729
10	.737
30	.756
40	.765
60	.779
70	.786
90	.801
100	.809

Landolt, 1865

%	t	d
100	22.1	0.7950
29.8	22.5	0.7397
0	22.5	0.7105

Squibb, 1873

%	4°	15°	15.6°	25°
0	0.73128	0.71888	0.71817	0.70751
1	.73257	.72020	.71948	.70886
2	.73386	.72152	.72080	.71020
3	.73415	.72185	.72212	.71155
4	.73644	.72418	.72343	.71289
5	.73764	.72544	.72469	.71419
6	.73884	.72670	.72595	.71551
7	.73904	.72794	.72721	.71633
8	.74124	.72918	.72847	.71814
9	.74225	.73044	.72973	.71944
10	.74366	.73170	.73100	.72075
11	.74487	.73195	.73227	.72207
12	.74608	.73420	.73353	.72336
13	.74728	.73537	.73473	.72457
14	.74847	.73654	.73593	.72579
15	.74968	.73771	.73713	.72701
16	.75086	.73888	.73833	.72822
17	.75193	.74008	.73953	.72944
18	.75299	.74129	.74074	.73065
19	.75406	.74250	.74194	.73186
20	.75512	.74370	.74314	.73307
21	.75634	.74488	.74431	.73430
22	.75756	.74606	.74548	.73553
23	.75878	.74725	.74664	.73676
24	.76000	.74843	.74782	.73799
25	.76127	.74970	.74912	.73931
26	.76255	.75098	.75041	.74063
27	.76383	.75226	.75171	.74195
28	.76510	.75353	.75300	.74327
29	.76640	.75483	.75430	.74462
30	.76770	.75613	.75560	.74596

Ramsay and Young, 1887

t	d	t	d
63 mol %			
0	0.777	110	0.657
10	.768	120	.644
20	.757	130	.628
30	.748	140	.613
40	.738	150	.596
50	.728	160	.577
60	.717	170	.556
70	.707	180	.534
80	.689	190	.517
90	.684	200	.474
100	.671	210	.425

Buchkremer, 1890

%	d
20°	
0	0.72078
20.710	.73893
40.014	.75412
61.175	.76936
78.850	.78107
100	.793495

Philip, 1897				Desmaroux, 1928			
%	d	%	d	mol%	d	mol%	d
16°				0°			
0	0.7168	80.100	0.7846	100	0.8087	51.26	0.7693
18.118	.7344	100	.7986	96.76	.8058	50.16	.7684
48.166	.7607			91.90	.8017	47.58	.7667
Hirobe, 1908				84.57	.7949	47.55	.7665
mol %	d	mol %	d	79.83	.7908	45.69	.7651
25.1°				78.45	.7900	45.44	.7651
0	0.70991	66.754	0.75494	69.90	.7828	39.39	.7611
8.816	.70991	71.910	.75951	63.96	.7784	35.41	.7585
27.558	.72595	83.797	.77004	60.56	.7758	21.03	.7492
43.790	.73715	96.947	.78298	60.38	.7757	12.52	.7445
58.890	.74874	100	.78542	56.44	.7726	0	.7364
Horiba, 1911				Wyman Jr., 1933			
%	d	%	d	%	d	%	d
25°				25°			
100	0.7901	9.51	0.7174	100.0	0.7853	51.47	0.752
27.26	.7338	0	0.7078	86.20	.7766	41.24	.745
16.69				77.40	.7708	30.82	.737
Baker, 1912				70.05	.7677	20.86	.728
%	d	%	d	61.93	.7614	13.08	.722
Sanfourche and Boutin, 1922						0	.708
%	d	%	d	Lalande, 1934			
15°				%	d	%	d
100	0.795	45	0.7575	0°			
95	.792	40	.7535	100	0.8062	41.82	0.7694
90	.789	35	.7495	91.45	.8014	34.29	.7640
85	.786	30	.746	85.40	.7977	18.77	.7524
80	.7825	25	.742	73.51	.7902	14.12	.7489
75	.779	20	.738	68.68	.7873	8.77	.7437
70	.779	15	.734	59.39	.7812	6.35	.7419
65	.772	10	.730	51.08	.7756	0	.7363
60	.768	5		45.86	.7720		
55	.765	0	.719	Bussy and Buignet, 1864			
50	.761			mol %	Dv/v	mol %	Dv/v
				75	0.0070	33.3	0.0084
				66.7	.0070	25	.0070
				60	.0079	20	.0069
				50	.0080	16.6	.0061
				40	.0091	2.3	.0060
				50 vol %	23.40°	Dt = -3.20°	

Guthrie, 1875

50 vol % 23.5° Dv = +0.7278 %

Wijkander, 1878

%	1st series					
	12°	20°	25°	30°	40°	50°
100	278	258	245	-	-	-
50	595	534	501	-	-	-
10	1482	1257	1138	1034	856	715

%	2nd series				
	10°	15°	20°	25°	30°
100	283	271	258	245	233
75	401	382	360	-	-
50	612	572	537	496	-
25	977	896	824	761	-
10	1552	1418	1280	1148	-
10	1564	1405	1270	1147	-

Hirata, 1908

%	η (alcohol=1)	
	25°	
75	0.6620	
87.5	.8187	
93.75	.9069	
96.881	.9575	
98.447	.9823	
99.228	.9949	
100	1.0000	

Horiba, 1911

%	η (water=1)	
	25°	
100	1.276	
16.69	0.3075	
9.51	0.284	
0	0.295	

Baker, 1912

%	η	%	η
25°			
100	1112	27.01	315.2
76.85	741.4	21.63	289.7
52.57	478.2	13.61	263.5
42.49	400.5	0	226.0
35.52	359.0		

Kono, 1923

%	η (water=1)	%	η (water=1)
15°			
100	1.158	50.48	0.477
88.18	0.947	43.37	.427
82.71	.840	33.19	.362
76.43	.779	28.74	.339
68.13	.641	20.50	.305
62.88	.609	8.75	.267
57.52	.534	0	.239

Optical and electrical properties

Landolt, 1865

%	n_D	
	20°	
100	1.3606	
29.8	1.3555	
0	1.3498	

Buchkremer, 1890

%	n_D	%	n_D
20°			
0	1.35360	61.175	1.36067
20.710	.35715	78.850	.36122
40.014	.35931	100	.36186

Horiba, 1911

%	n_D	
	25°	
100	1.36032	
27.26	.35532	
16.69	.35402	
9.51=	.35265	
0	.34985	

Sanfourche and Boutin, 1922

%	n_D	%	n_D
15°			
100	1.363660	45	1.361090
95	.363590	40	.360632
90	.363554	35	.360272
85	.363302	30	.359948
80	.363230	25	.359120
75	.362905	20	.358436
70	.362765	15	.357680
65	.362310	10	.357068
60	.361990	5	.356132
55	.361954	0	.35543
50	.361630		

Philip, 1897

%	ϵ	%	ϵ
18°			
100	(26.8)	18.118	7.19
80.100	21.71	0	4.292
48.166	13.63		

Wyman Jr., 1933

%	ϵ	%	ϵ
25°			
100.00	24.28	41.24	10.76
86.20	20.96	30.82	8.712
77.40	18.90	20.86	6.998
70.05	17.20	13.08	5.885
61.93	15.26	0	4.235
51.47	12.89		

Higasi, 1934

mol %	ϵ
25°	
0	4.35
11.3	5.27
21.0	6.17
31.9	7.44
57.0	13.00
100.0	25.00

Pfeiffer, 1885

%	$\tau \cdot 10^5$	n
18°		
100	-704	1.964
86.76	-230	1.793
76.55	-132	1.586
70.88	+443	1.544
65.38	+101	1.228
49.98	+940	0.979
40.91	+300	0.655
27.46	-960	0.167
0	+683	2.242

Desmaroux, 1928

mol %	λ (alcohol=1)	mol %	λ (alcohol=1)
0°			
100	1.000	53.7	1.265
86.3	1.149	49.5	1.109
75.8	1.245	46.5	0.905
67	1.295	42.8	0.673
59.3	1.319	33.8	0.439

Heat constants .

Bussy and Buignet, 1864

45.32 % Q mix = -18.404 cal/g

Guthrie, 1875

50 vol % 23.5° Q mix is negative .

Hirobe, 1908

mol %	Q mix	mol %	Q mix
0	-	66.754	-114.1
8.816	- 91.3	71.910	-103.6
27.558	-159.5	83.797	- 60.8
43.790	-161.8	96.947	- 9.6
58.890	-135.9	100	-

Desmaroux, 1928

mol %	Q mix	mol %	Q mix
63.1	-111	36.1	-149
58.1	-122	35.9	-144
54.7	-130	32.2	-146
52.3	-133	28.7	-146
49.6	-139	25.4	-143
46.4	-137	22.4	-139
45	-142	18.7	-131
41.3	-142	14.8	-117
40	-144	11.5	- 95
37.9	-145		

Ether ($C_4H_{10}O$) + Propyl alcohol (C_3H_8O)

Schmidt, 1891

%	C.V.T.	%	C.V.T.
100	270.5	19.55	211.3
35.16	224.5	16.37	203.9
33.79	221.2	0	193.5

Baker, 1912

%	d	η	%	d	η
25°					
100	0.8010	1971	40.11	0.7473	427.4
88.07	.7918	1404	27.03	.7341	335.6
77.01	.7818	1024	13.78	.7200	271.7
65.08	.7730	752.8	0	.7075	226.0
52.84	.7594	561.9			

Hirobe, 1908

mol%	d	Q mix	mol%	d	Q mix
25°15'					
100	0.79982	-	53.221	0.75601	-163.6
93.111	.79315	-30.9	42.575	.74619	-174.9
91.349	.78215	-78.1	21.100	.72702	-152.3
69.486	.76950	-123.7	10.556	.71744	-102.9
55.488	.75801	-158.2	0	.70758	-

Ether ($C_4H_{10}O$) + Isobutyl alcohol ($C_4H_{10}O$)

Hirobe, 1908

mol %	d	Q mix
25.15°		
100	0.79806	-
89.030	.78934	- 63.5
75.326	.77837	-131.9
63.464	.76822	-174.9
51.868	.75784	-200.5
45.510	.75223	-207.2
31.720	.73896	-199.7
13.864	.72218	-131.3
5.218	.71352	- 60.3

Higasi, 1934

mol%	ϵ	mol%	ϵ
20°			
0	4.35	29.7	6.50
5.7	4.68	43.3	7.96
9.6	4.93	50.0	8.79
11.4	5.07	100	20.0
13.7	5.22		

Ether ($C_4H_{10}O$) + Amyl alcohol ($C_5H_{12}O$)

Higasi, 1934

mol%	ϵ	mol%	ϵ
20°			
0	4.35	26.8	6.03
5.1	4.62	47.3	7.94
19.8	5.54	100.0	15.4

Ether ($C_4H_{10}O$) + Isoamyl alcohol ($C_5H_{12}O$)

Hirobe, 1908

mol %	d	Q mix
25.15°		
0	0.70794	-
11.750	.72359	-111.1
18.680	.73190	-144.2
29.658	.75184	-176.6
42.949	.75827	-185.4
44.611	.76039	-184.0
58.635	.77327	-167.0
68.131	.78225	-141.5
87.547	.79734	- 64.7
100	.80730	-

Ether ($C_4H_{10}O$) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
7.4	-40.0
27.9	-20.0
83.8	0.0
100	6.88

Ether ($C_4H_{10}O$) + Dodecyl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
1.4	-40.0
4.9	-20.0
30.7	0
90.5	20
100	23.95

Ether ($C_4H_{10}O$) + Tetradecyl alcohol ($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
0.1	-40.0	79.1	30.0
1.2	-20.0	92.1	34.5
8.5	0.0	100	38.26
50.0	20.0		

Ether ($C_4H_{10}O$) + Cetyl alcohol ($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
0.1	-20.0	43.1	30.0
2.9	0.0	54.7	34.5
20.6	20.0	100	49.62

Ether ($C_4H_{10}O$) + Octadecyl alcohol ($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.5	0.0
7.1	20.0
20.9	30.0
31.5	34.5
100	57.98

Ether ($C_4H_{10}O$) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
50.232	-6.61	-8.24	-9.85	-11.51	-12.24	12.84
25.116	-7.53	-9.56	-10.99	-12.94	-13.86	-
12.558	-8.52	-10.59	-12.10	-14.01	-15.13	-
5.216	-8.63	-9.97	-11.50	-13.04	-14.38	-16.10
2.608	-8.44	-9.97	-11.50	-13.04	-14.27	-

Ether ($C_4H_{10}O$) + Trichlorolactamide ($C_3H_4O_2NCl_3$)

Meldrum and Turner, 1908

c	D b. t.	c	D b. t.
11.73	1.015	6.97	0.695
10.78	0.960	5.69	.605
8.14	.780		

c = g trichlorolactamide in 100 cc ether.

Ether ($C_4H_{10}O$) + Menthol ($C_{10}H_{20}O$)

Castiglioni, 1934

%	d	η	%	d	η
20°					
0	0.7237	249.22	40	0.7921	555.84
10	.7379	284.38	50	.8108	774.68
20	.7560	333.84	60	.8292	1138.09
30	.7758	436.02			

Ether ($C_4H_{10}O$) + Borneol ($C_{10}H_{18}O$)

Gilbault, 1897

%	crit. t.	P crit.
36.718	278.4	80.5
9.4553	198.2	60.6
0.00	189.9	36.8

Darmois, 1910

c	(α) ₅₇₈₀
15.92	-21.4
28.72	-22.0
53.8	-21.6

Ether ($C_4H_{10}O$) + Ethyl mercaptan (C_2H_6S)

Lecat, 1949

%	b. t.
0	34.6
35	34.0 Az
100	35.8

Ethylpropylether ($C_5H_{12}O$) (b.t.=63.85) + varia

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	(CH_4O)	64.65	24	55.5	-0.8 (25%)
Ethyl alcohol	(C_2H_6O)	78.3	14	60.7	-2.2 (24%)
Isopropyl alcohol	(C_3H_8O)	82.4	6	62.7	-3.2 (50%)
Propyl mercaptan	(C_3H_8S)	67.3	9	63.5	-

Propyl ether ($C_6H_{14}O$) (b.t.=90.1) + varia

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Tert. butyl alcohol	($C_4H_{10}O$)	72.45	52	79.2	-
Dimethyl ethyl carbinol	($C_5H_{12}O$)	102.35	17 20	88.8 -	-2.2
Allyl alcohol	(C_3H_6O)	96.85	20 30	- 85.7	-2.3 -
Ethyl alcohol	(C_2H_6O)	78.35	44 50	74.4 -	- -2.8
Propyl alcohol	(C_3H_8O)	97.2	29 30	90.1 -	- -2.5
Isopropyl alcohol	(C_3H_8O)	82.4	52 54	- 78.3	-3.5 -
Isobutyl alcohol	($C_4H_{10}O$)	108.0	5 10	- 89.5	-1.0 -
Sec. Butyl alcohol	($C_4H_{10}O$)	108.0	15 22	- 88.0	-2.0 -

Ethyl tert. butyl ether ($C_6H_{14}O$) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.
0	73
21	66.6 Az
100	78.3

Ethyl isobutyl ether ($C_6H_{14}O$) + Isobutyl alcohol ($C_4H_{10}O$)

Bouillon, 1950

%	b. t. (743mm)	n_D^{20}
0	79	-
18.43	78 Az	1.3764

Lecat, 1949

%	b. t.
0	73
21	66.6 Az
100	99.5

Ethyl tert. amyl ether ($C_7H_{16}O$) + Isopropyl alcohol (C_3H_8O)

Bouillon, 1949

%	b. t.	n_D^{20}
0	103	-
71.91	79 Az	1.3800

Ethyl tert. amyl ether ($C_7H_{16}O$) (b.t.= 10.1) + Alcohols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Ethyl alcohol	C ₂ H ₆ O	78.3	21	66.6
sec. butyl-alcohol	C ₄ H ₁₀ O	99.5	39	94.5

Isopropyl ether (C ₆ H ₁₂ O) + Isopropyl alcohol (C ₃ H ₈ O)							
Miller, Harding and Bliss, 1940							
% L V		b.t.		% L V b.t.			
100	100	82.3	41.6	30.7	66.77		
98.65	93.40	81.06	34.2	27.4	66.33		
91.60	69.8	76.02	26.8	24.3	66.20		
86	62.2	73.98	25.3	23.6	66.18		
82	56.3	72.48	24.6	23.3	66.18		
80.87	54.9	72.78	21.85	12.75	66.17		
71.8	45.6	69.93	15.4	17.9	66.31		
65.55	42.5	69.90	12.3	16	66.56		
61.5	37.9	68.18	10.9	15.3	66.33		
57.1	37.4	68.02	9	13.2	66.57		
56.4	35.1	67.79	8.2	11.9	66.77		
55.6	35.6	67.87	4.5	8.5	67.09		
52.3	34.8	67.56	1.1	3.6	67.73		
52.2	34.2	67.53	0	0	68.00		
48	33.1	67.19					
mol%		d		mol%		d	
25°							
100	0.7810	52.24	0.7453				
99.92	.7766	50.14	.7444				
83.62	.7670	43.86	.7408				
77.06	.7623	34.07	.7356				
74.08	.7598	25.68	.7317				
73.23	.7596	23.70	.7305				
66.68	.7549	15.94	.7261				
65.20	.7543	11.79	.7252				
58.14	.7493	0	.7191				
Miller and Bliss, 1940							
66.15°		21.8 mol% Az					
Lecat, 1949							
% 0 16.3 100		b.t. 69.0 66.2 Az 82.4					
Isopropyl ether (C ₆ H ₁₄ O) + Ethylene chlorhydrin (C ₂ H ₅ OC1)							
Snyder and Gilbert, 1942							
mol%		b.t.		mol%		b.t.	
L	V	L	V	L	V	L	V
97.9	43.2	106.0	73.8	8.5	76.0		
97.2	43.0	105.3	65.4	7.3	74.5		
96.1	34.0	97.0	56.1	5.9	73.1		
92.6	20.0	89.3	51.5	5.2	72.7		
87.3	14.3	83.5	33.6	3.7	70.7		
79.8	10.1	77.8	27.7	3.3	70.0		

Isopropyl ether (C ₆ H ₁₄ O) + Propyl mercaptan (C ₃ H ₈ S)							
Lecat, 1949							
% 0 65 100		b.t. 68.3 66.0 Az 67.3					
Butyl ether (C ₈ H ₁₈ O) (b.t.=142.4) + varia							
Lecat, 1949							
2 nd comp.		Az					
Name	Formula	b.t.	%	b.t.	Dt mix		
Amyl alcohol	C ₅ H ₁₂ O	138.2	50	134.5	-2.5		
Isoamyl alcohol	C ₅ H ₁₂ O	131.9	70	129.8	-		
Glycol	C ₂ H ₆ O ₂	197.4	12	140.2	-1.3		
Methoxy-glycol	C ₃ H ₈ O ₂	124.5	68	122.0	-		
Ethoxy-glycol	C ₄ H ₁₀ O ₂	135.3	55	130.2	-2.0		
Methyl-lactate	C ₄ H ₈ O ₃	143.8	42	137.0	-2.5		
Ethyl-lactate	C ₅ H ₁₀ O ₃	154.1	10	141.5	-		
Ethylene-chlorhydrine	C ₂ H ₅ OC1	128.6	65	125.0	-1.2		
Ethylene-bromhydrine	C ₂ H ₅ OB _r	150.2	-	138	-		
Cyclopentanol	C ₅ H ₁₀ O	140.85	20	-	-		
Dichlor-ethanol	C ₂ H ₄ OC1 ₂	146.2	45	136.7	-1.7		
Chlor-2-pentanol	C ₅ H ₉ OC1	133.7	70	136.0	-		
Ethanol-amine	C ₂ H ₇ ON	170.8	16	130.5	-		
				136.5	-		
Butyl ether (C ₈ H ₁₈ O) + Ethylene chlorhydrin (C ₂ H ₅ OC1)							
Snyder and Gilbert, 1942							
mol%		b.t.		mol%		b.t.	
L	V	L	V	L	V	L	V
99.2	96.8	127.1	42.7	59.5	124.0		
92.1	82.2	123.7	31.3	54.9	125.0		
84.9	75.5	123.3	21.0	49.1	126.9		
75.5	71.0	123.0	11.5	40.0	129.8		
64.9	67.4	123.0	4.8	24.3	134.6		
54.9	64.3	123.3					

Isobutyl ether ($C_4H_{10}O$) (b.t.= 122.3) + varia
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	48	113.5	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	70	106.5	-
Amyl alcohol	$C_5H_{12}O$	138.2	5	-	-0.6
		9	121.4	-	-
Isoamyl alcohol	$C_5H_{12}O$	132.9	22	119.8	-
		30	-	-	-3.0
Pentanol-2	$C_5H_{12}O$	116.0	52	113.5	-
Pentanol-3	$C_5H_{12}O$	119.8	35	-	-3.0
		47	116.5	-	-

Amyl ether ($C_5H_{12}O$) + Methyl alcohol (CH_3O)

Schonrock, 1895

%	d	(α) _{magn.}
	20°	
0	0.77730 (18.3)	1.2643
79.790	.80397	1.2088 (19.7°)
100	.81145	-

Amyl ether ($C_5H_{12}O$) + Ethyl alcohol (C_2H_6O)

Schonrock, 1895

%	d	(α) _{magn.}
	20.9°	
0	0.77730 (18.3)	1.2643
31.949	.78708	1.2797 (20.8°)
100	.79126	1.2643

Clarke, 1905

%	Q mix (cal/g)
19.0	0.89
25.5	0.97
31.6	1.03
41.4	1.15
49.3	1.16
49.9	1.13
55.1	1.08
63.3	0.98
71.4	0.89
71.7	0.83
77.2	0.67

Amyl ether ($C_5H_{12}O$) (b.t.=187.5) + alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Isooctyl alcohol	$C_8H_{18}O$	180.4	86	179.8	-0.6 (95%)
Glycol	$C_2H_6O_2$	197.4	26	168.8	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	67	169.0	-
		80	-	-	-1.8
Methoxy-di glycol	$C_5H_{12}O_3$	192.95	46	179.5	-
Ethoxy-di glycol	$C_6H_{14}O_3$	201.9	-	183.0	-
Glycol-monoacetate	$C_4H_8O_3$	190.9	42	180.8	-
		70	-	-	-2.5
Ethanol-amine	C_2H_7ON	170.8	50	160.0	-

Isoamylether ($C_{10}H_{22}O$) (b.t.=173.2) + Alcohols.
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Hexyl alcohol	$C_6H_{14}O$	157.65	50	-	-3.2
		89	157.0	-	-
Heptyl alcohol	$C_7H_{16}O$	178.15	38	170.2	-
		40	-	-	-1.7
Isooctyl alcohol	$C_8H_{18}O$	180.4	17	172.65	-
		30	-	-	-1.8
Glycol	$C_2H_6O_2$	197.4	22	161.4	-
Pinacol	$C_6H_{14}O_2$	174.35	38	166.5	-2.4
Propoxy-glycol	$C_5H_{12}O_2$	151.35	50	150.2	-
Glycol-monoacetate	$C_4H_8O_3$	190.9	28	170.2	-
		50	-	-	-3.0
Propyl lactate	$C_6H_{12}O_3$	171.7	50	-	-2.2
		53	167.0	-	-
Isobutyl lactate	$C_7H_{14}O_3$	182.15	10	-	-1.2
		13	172.0	-	-
Ethanol amine	C_2H_7ON	170.8	30.5	149.5	-
Diethyl-ethanolamine	$C_6H_{15}ON$	162.2	58	158.5	-
Cyclo-hexanol	$C_6H_{12}O$	160.8	79	159.35	-
		80	-	-	-1.2
Methyl-cyclohexanol	$C_7H_{14}O$	168.5	63	166.2	-
		65	-	-	-1.5
Furfuryl alcohol	$C_5H_6O_2$	169.35	20	-	-1.5
		55	163.5	-	-
Ethylene iodhydrine	C_2H_5OI	176.5	50	166.5	-
Dichlor-ethanol	$C_2H_4OC1_2$	146.2	85	145.0	-
Dichlor-1.3	$C_3H_6OC1_2$	175.8	48	165.7	-0.1
propanol-1.2	C_3H_8OC1	182.5	37	167.5	-

Vinyl ethyl ether (C_4H_8O) + Ethyl alcohol (C_2H_6O)

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	36.0	-	-
1 (Az)	35.9-36.9	7534	1.3778
100	78.3	-	-

Vinyl propyl ether ($C_5H_{10}O$) + Ethyl alcohol (C_2H_6O)

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	65.1	-	-
17.2 (Az)	59.8	0.7725	1.3855
100	78.3	-	-

Vinyl propyl ether ($C_5H_{10}O$) + Propyl alcohol (C_3H_8O)

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	65.1	-	-
4.5 (Az)	64.9	0.7697	1.3895
100	97.2	-	-

Vinyl isopropyl ether ($C_5H_{10}O$) + Ethyl alcohol (C_2H_6O)

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	55.8	-	-
10.5 (Az)	53.6	0.7564	1.3827
100	78.3	-	-

Vinyl isopropyl ether ($C_5H_{10}O$) + Isopropyl alcohol (C_3H_8O)

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	55.8	-	-
5.9 (Az)	55.2	0.7557	1.3842
100	82.4	-	-

Vinyl butyl ether ($C_6H_{12}O$) + Butyl alcohol ($C_4H_{10}O$)

Shostakovski and Prielezhaeva, 1947

mol%	b.t.
0	93.8
10.1 (Az)	93.3
100	117.7

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
0	93.7	-	-
7.8 (Az)	93.2	0.7818	1.4026
100	117.7	-	-

Vinyl isobutyl ether ($C_6H_{12}O$) + Isobutyl alcohol ($C_4H_{10}O$)

Shostakovski and Prielezhaeva, 1947

mol%	b.t.
0	83.0
8.2 (Az)	82.7
100	108.6

Shostakovski, Prielezhaeva and Uvarova, 1953

%	b.t.	d	n_D
20°			
0	83.0	-	-
6.1 (Az)	82.7	0.7705	1.3988
100	108.6	-	-

Vinyl isoamyl ether ($C_7H_{14}O$) + Isoamyl alcohol ($C_7H_{12}O$)				Methylal ($C_3H_8O_2$) + Methyl alcohol (CH_4O)			
Shostakovski and Prielezhaeva, 1947				Lecat, 1949			
mol%		b. t.		%		b. t.	
0		112.6		0		42.3	
15 (Az)		112.1		8.2		41.85 Az	
100		131.1		100		64.65	
Shostakovski, Prielezhaeva and Uvarova, 1953							
%		b. t.		d		n_D	
				20°			
0		112.6		-		-	
12.5 (Az)		112.1		0.7866		1.4097	
100		131.2		-		-	
Allyl ether ($C_6H_{10}O$) + Allyl alcohol (C_3H_6O)				Methylal ($C_3H_8O_2$) + Ethyl mercaptan (C_2H_6S)			
Lecat, 1949				Lecat, 1949			
%		b. t.		%		b. t.	
0		94.84		0		42.3	
30		89.8 Az		80		34.5 Az	
100		96.85		100		35.8	
Ethyl butenyl ether ($C_6H_{12}O$) + Ethyl alcohol (C_2H_6O)				Methyl ethyl formal ($C_4H_{10}O_2$) + Methyl alcohol (CH_4O)			
Lecat, 1949				Lecat, 1949			
%		b. t.		%		b. t.	
0		76.65		0		65.9	
24		69.0 Az		25.3		57.1 Az	
100		78.3		100		64.65	
Ethyl butenyl ether cis ($C_6H_{12}O$) + Ethyl alcohol (C_2H_6O)				Methyl ethyl formal ($C_4H_{10}O_2$) + Ethyl alcohol (C_2H_6O)			
Lecat, 1949				Lecat, 1949			
%		b. t.		%		b. t.	
0		100.3		0		65.9	
61		76.5 Az		13.3		64.05 Az	
100		78.3		100		78.3	
Ethyl butenyl ether trans ($C_6H_{12}O$) + Ethyl alcohol (C_2H_6O)							
Lecat, 1949							
%		b. t.		%		b. t.	
0		100.45		0		65.9	
67		77.3 Az		13.3		64.05 Az	
100		78.3		100		78.3	

Ethylal ($C_5H_{12}O_2$) (b.t.= 87.95) + alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	(CH_4O)	64.65	50	-	-1.3
			65	63.2	-
Ethyl alcohol	(C_2H_6O)	78.3	42	74.2	-
Propyl alcohol	(C_3H_8O)	97.2	14	86.7	-
			50	-	-5.2
Isopropyl alcohol	(C_3H_8O)	82.4	52	79.6	-
			58	-	-5.2
Allyl alcohol	(C_3H_6O)	96.85	10	-	-2.0
			11	87.0	-

Acetal ($C_6H_{14}O_2$) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b.t.	Dt mix
0	103.55	-
50	-	-3.0
76	77.95 Az	-
100	78.3	-

" Oholm, 1913

N	diff. ratio (cm ² /jour)	η
	20°	
2	0.98	-
1	0.98	1044
0.5	-	1133
0.25	-	1166
0	-	1216

Dimethylacetal ($C_4H_{10}O_2$) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.
0	64.3
24.2	57.5 Az
100	64.65

Dimethylacetal ($C_4H_{10}O_2$) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b.t.
0	64.3
12	62.0 Az
100	78.3

Dibutylacetal ($C_{10}H_{22}O_2$) + Butyl alcohol ($C_4H_{10}O$)

Conner, Elving and Steingiser, 1948

b.t.	L		V	
	wt%	mol%	wt%	mol%
762 mm				
137.8	0.0	0.0	0.0	0.0
176.5	0.2	0.5	12.3	24.7
163.1	0.8	1.8	24.6	43.5
160.0	2.0	4.6	35.3	56.1
143.0	3.5	7.9	52.5	72.3
133.0	12.3	24.7	73.3	86.5
125.5	31.0	51.4	83.9	92.4
122.2	46.7	67.2	90.0	95.5
120.5	67.4	83.0	94.2	97.4
wt%	mol%		d	
25°				
0	0		0.8275	
20	37.0		.8238	
40	61.0		.8198	
60	77.9		.8153	
80	90.4		.8106	
100	100		.8057	

Phenyl ether ($C_{12}H_{10}O$) + Ethyl alcohol (C_2H_6O)

Perrakis, 1925

mol%	f.t.	mol%	f.t.
0	27.89	80.0	17.7
6.173	25.25	82.44	16.55
13.0	23.9	84.16	15.8
22.63	22.6	89.26	11.25
29.40	22.1	89.31	11.2
38.37	21.35	91.68	6.4
47.49	21.1	93.66	0.6
52.35	20.65	95.15	-6.5
60.15	19.9	98.18	-33
68.12	19.65	98.79	-61
76.70	18.5	100	-113.9

mol%	d	mol%	d
30°			
0	1.0655	46.19	0.9988
6.76	.0585	49.13	.9930
8.85	.0562	56.85	.9765
14.11	.0407	71.29	.9359
18.46	.0438	81.88	.8954
19.64	.0423	90.96	.8485
29.51	.0281	100	.7862
41.26	.0082		
%	U	%	U
31°			
0	0.433	70.10	0.527
11.31	.453	82.90	.548
20.31	.473	88.08	.557
33.76	.488	92.26	.565
47.44	.502	94.71	.573
56.03	.513	100	.580

Paraldehyde (C₆H₁₂O₃) + Methyl malate 1 (C₆H₁₀O₅)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
20°						
50.035	-5.10	-5.80	-6.40	-7.10	-7.29	-7.49
25.0175	-4.72	-5.04	-5.96	-6.72	-6.80	-
12.5088	-3.84	-4.40	-4.88	-4.96	-5.04	-
4.927	-2.03	-2.44	-2.84	-3.04	-2.84	-2.64
2.4635	-1.62	-0.81	0.00	+0.61	+1.62	-

Paraldehyde (C₆H₁₂O₃) + Ethyl tartrate (C₈H₁₄O₆)

Patterson and Pollock, 1914

t	d	(α) _D	t	d	(α) _D
50%					
20	1.0975	3.93	57	1.053	9.05
33.1	.082	6.19	67.5	.041	9.95
42.9	.070	7.40			
t	d	(α) _D	t	d	(α) _D
100°					
16.8	1.2087	20.1		7.67	
37.2	.1878	33.7		9.10	
46.8	.1783	37.6		9.56	
58.3	.1665	46.1		10.24	
68.1	.1566	55.1		10.94	
		67.2		11.75	

1,2-Dichlor ether (C₄H₈OCl₂) (b.t.= 145.5)
+ Alcohols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Butyl alcohol	(C ₄ H ₁₀ O)	117.8	99.4	117.0
Isobutyl alcohol	(C ₅ H ₁₂ O)	131.9	70	129.2
Cyclopentanol	(C ₅ H ₁₀ O)	140.85	50	136.5
Propoxyglycol	(C ₅ H ₁₂ O ₂)	151.35	70	144.3
				-3.0 (30%)

Lecat, 1949

Dichlorether sym. (C₄H₈OCl₂) (b.t.=178.65) + alcohols

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Hexyl alcohol	(C ₆ H ₁₄ O)	178.5	75 78	- 157.5	-4.7 -
Heptyl alcohol	(C ₇ H ₁₆ O)	176.15	50	173.5	-6.5
Isooctyl alcohol	(C ₈ H ₁₈ O)	180.4	35 38	- 177.2	-5.7 -
Glycol	(C ₂ H ₆ O ₂)	197.4	21	171.05	115
Methyl- cyclohexanol	(C ₇ H ₁₄ O)	168.5	60 50	167.5 167.85	-3.5 -
Butoxy- glycol	(C ₆ H ₁₄ O ₂)	171.15	50 75	- 170.85	- -
Ethylene- chlorhydrine	(C ₂ H ₅ OC1)	128.6	85	128.2	-

Chlorex ($C_4H_8OCl_2$) + Methyl alcohol (CH_3O)

Tscharmler, Richter and Wettig, 1949 (fig.)

mol%	f.t.	mol%	f.t.
100	-97.5	32.5	-53.2
87.9	-61.0	18.2	-52.9
70.2	-55.1	7.8	-51.2
44.1	-53.7	0	-47.0

mol%	Dv	mol%	Dv
25°			
90	-0.38	50	-0.44
80	-0.46	30	-0.34
70	-0.50	10	-0.15
60	-0.48		

mol%	U	Q mix	mol%	U	Q mix
25°					
100	0.620	-	40	0.461	-279
90	.586	-95.0	30	.440	268
80	.556	168	20	.419	225
70	.528	220	10	.402	148
60	.504	255	0	.387	-
50	.483	274			

Chlorex ($C_4H_8OCl_2$) + Ethyl alcohol (C_2H_5O)

Tscharmler, Wettig and Richter, 1949,

Tscharmler, Richter and Wettig, 1949 (fig.)

mol%	Sat. t.	mol%	Sat. t.
70	-35	40	-31.5
60	-32.5	30	-33
50	-31.5	20	-35

mol%	U	Q mix	mol%	U	Q mix
25°					
100	0.602	-	40	0.449	-412
90	.565	-142	30	.430	388
80	.538	270	20	.414	325
70	.515	343	10	.399	215
60	.492	385	0	.387	-
50	.470	408			

Chlorex ($C_4H_8OCl_2$) + Propyl alcohol (C_3H_7O)

Tscharmler, Wettig and Richter, 1949 (fig.)

mol%	f.t.	Sat. t.	mol%	f.t.	Sat. t.
100	-126.5	-	35.2	-48.6	-34.6
94	-62.2	-	26.8	-	-36.9
90.4	-55.4	-	14.8	-48.6	-44.5
85.4	-	-51.0	12.2	-48.6	-49.4
79.7	-48.9	-40.9	8.7	-48.0	-
70.2	-	-35.0	4.4	-47.8	-
59.7	-	-33.0	0	-46.9	-
48.1	-	-33.1			

Chlorex ($C_4H_8OCl_2$) + alcohols

Tscharmler, 1949

1 volume + 1 volume

Alcohol	sat. t.
Ethyl alcohol (C_2H_5O)	-33.9
Propyl " (C_3H_7O)	-33.2
Butyl " (C_4H_9O)	-24.9
Amyl " ($C_5H_{11}O$)	-14.6
Hexyl " ($C_6H_{13}O$)	-11.8
Heptyl " ($C_7H_{15}O$)	-3.1
Octyl " ($C_8H_{17}O$)	-1.0
Isopropyl " (C_3H_7O)	-17.0
2-Methylpropanol-(1) ($C_4H_{10}O$)	-12.5
2-Methylbutanol-(4) ($C_5H_{12}O$)	-12.9
d-2-Methylbutanol-(1) "	-9.4
2-Methylpentanol-(1) ($C_6H_{14}O$)	-6.7
Methyldiethylcarbinol ($C_6H_{14}O$)	-16.9
2-Methyl-5-oxyhexane ($C_7H_{16}O$)	-4.0
Glycol ($C_2H_6O_2$)	+113.8
2-4-Butanediol ($C_4H_{10}O_2$)	+53.8
1,7-Heptanediol ($C_7H_{16}O_2$)	+60.5

Chlorex ($C_4H_8OCl_2$) + Butyl alcohol ($C_4H_{10}O$)

Tscharler, Richter and Wettig, 1949

mol%	Sat. t.	mol%	Sat. t.
25	-29.5	60	-25
40	-25	70	-26.5
50	-24.5		

mol%	U	Q mix	mol%	U	Q mix
25°					
10	0.595	-	60	0.476	-
20	.579	-183	70	.455	-
30	.558	320	80	.434	-393
40	.539	410	90	.412	247
50	.518	-		.388	-
	.497	-			

C.S.T. = -24.9°

Chlorex ($C_4H_8OCl_2$) + Amyl alcohol ($C_5H_{12}O$)

Tscharler, Richter and Wettig, 1949 (fig.)

mol%	U	Q mix	mol%	U	Q mix
25°					
0	0.580	-	60	0.459	-
10	.560	-194	70	.439	-
20	.539	344	80	.419	-415
30	.519	-	90	.401	267
40	.499	-	100	.387	-
50	.479	-			

C.S.T. = -14.6° (50 vol%)

mol%	Dv	Sat. t.	mol%	Dv	Sat. t.
0	-0.03	-	60	-0.15	-14
10	-0.08	-	70	-0.10	-15.5
20	-0.12	-17	80	-0.08	-
30	0.15	-15	90	-0.04	-
40	0.16	-14	100		
50					

Chlorex ($C_4H_8OCl_2$) + Hexyl alcohol ($C_6H_{14}O$)

Tscharler, 1949 (fig.)

mol%	Sat. t.	mol%	Sat. t.
0.3	-15.5	0.6	-12.5
0.4	-12.5	0.7	-14.5
0.5	-12		

Chlorex ($C_4H_8OCl_2$) + Heptyl alcohol ($C_7H_{16}O$)

Tscharler, 1949 (fig.)

mol%	Sat. t.
40	-4
50	-3
60	-3
70	-4

Chlorex ($C_4H_8OCl_2$) + Octyl alcohol ($C_8H_{18}O$)

Tscharler, 1949 (fig.)

mol%	Sat. t.
40	-3.5
50	-1.5
60	-1
70	-2.5

Chlorex ($C_4H_8OCl_2$) + Ethylene chlorhydrin
(C_2H_5OC1)

Snyder and Gilbert, 1942

mol%			mol%		
b. t.	L	V	b. t.	L	V
128.3	98.0	96.0	133.0	53.1	83.5
128.2	97.0	94.5	135.6	39.2	80.3
128.2	96.0	93.4	139.4	27.1	74.2
128.2	91.9	91.4	144.6	17.1	65.0
128.4	86.3	89.9	152.2	9.1	54.5
128.8	80.7	88.9	160.8	4.4	38.3
130.4	68.1	86.3	167.0	2.0	20.5

Tschamler and Krischaj, 1951

P-Chlorex ($C_6H_{12}OCl_2$) + Alcohols

2 nd comp.	Sat. t.
50 vol%	
Propyl alcohol (C_3H_8O)	-90.5
Isopropyl alcohol (C_3H_8O)	-59.4
Butyl alcohol ($C_4H_{10}O$)	-85.0
Isobutyl alcohol ($C_4H_{10}O$)	-62.0
Amyl alcohol ($C_5H_{12}O$)	-71.0

Trichlormethylether ($C_2H_3Cl_3$) + Methoxyglycol
($C_3H_8O_2$)

Lecat, 1949

%	b. t.
0	131.2
25	123.0 Az
100	124.5

Lecat, 1949

Chloracetal ($C_6H_{11}O_2Cl$) (b. t. = 157.4) + alcohols

	2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.	Dt mix.
Hexyl alcohol	(C ₆ H ₁₄ O)	157.85	42	154.5	-
Pinacol	(C ₆ H ₁₄ O ₂)	174.35	-	155.9	-
Cyclo-hexanol	(C ₆ H ₁₂ O)	160.8	35	155.2	-
Ethyl-lactate	(C ₅ H ₁₀ O ₃)	154.1	73	152.8	-1.2

Diethyloxonium bromide ($C_4H_{11}OBr$) +
Ethyl alcohol (C_2H_6O)

Maass and Russell, 1918

%	f. t.	%	f. t.
0	-40.0	17.4	-62.6
6.0	-45.4	19.3	-65.8
9.2	-49.5	21.4	-70.5
11.8	-52.5	23.4	-75.5
15.4	-58.8		

Complex chloral with Ethyl tartrate + Ethyl alcohol
(C_2H_6O)

Jones, 1933

λ	(α)	λ	(α)	λ	(α)
20°					
78.75 % d=0.8856					
6708	29.30	5466	44.75	5086	52.02
6439	31.80	5461	44.91	4811	58.65
6363	32.76	5218	49.34	4800	58.83
6104	35.58	5209	-	4678	62.13
5893	38.34	5153	50.76	4602	64.33
5780	39.91	5105	-	4358	72.28
5700	41.08				
87.59 % d=0.8460					
6708	29.12	5466	-	5086	51.91
6439	31.63	5461	44.68	4811	58.40
6363	32.52	5218	49.10	4800	58.63
6104	35.38	5209	49.34	4678	-
5893	38.12	5153	50.30	4602	64.26
5780	39.64	5105	51.58	4358	72.06
5700	40.75				

Di (chlormethyl) sulfide ($C_2H_4Cl_2S$)
+ Ethyl alcohol (C_2H_6O)

Thompson, Black and Sohl, 1921

%	sat. t.	%	sat. t.
95.31	13.6	67.00	13.6
93.13	14.5	61.91	12.2
91.04	14.8	57.52	11.8
87.13	15.3	53.73	10.6
83.12 C.S.T.	15.6	50.39	9.1
80.25	15.5	47.45	7.5
75.76	14.8	44.83	5.6
71.75	14.2		

Yperite ($C_4H_8Cl_2S$) + Glycol (C_2H_6O)

Lecat, 1949

%	b. t.
0	216.8
4	186.0 Az
100	197.4

Yperite ($C_4H_8Cl_2S$) + Benzyl alcohol (C_7H_8O)

Lecat, 1949

%	b. t.
0	216.8
100	195.5 Az
	205.25

Methyl sulfide (C_2H_6S) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.	Dt mix
0	37.4	-
13	34.5 Az	-
15	-	-3.2
100	64.65	-

Methyl sulfide (C_2H_6S) + Ethyl mercaptan (C_2H_6S)

Lecat, 1949

%	b.t.
0	37.4
62	34.8 Az
100	35.8

Ethyl sulfide ($C_4H_{10}S$) (b.t.=92.1) + alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	(CH_4O)	64.65	62	61.2	-
			65	-	-4.0
Ethyl alcohol	(C_2H_6O)	78.3	56	72.6	-
			93	-	-1.2
Propyl alcohol	(C_3H_8O)	97.2	28	85.5	-
			50	-	-4.7
Isopropyl alcohol	(C_3H_8O)	82.4	45	-	-5.1
			52	79.0	-
Sec. Butyl alcohol	($C_4H_{10}O$)	99.5	32	89.0	-4.2
Tert. Butyl alcohol	($C_4H_{10}O$)	82.45	70	79.8	-
Allyl alcohol	(C_3H_6O)	96.85	30	85.0	-
			50	-	-5.5
Isobutane-thiol	($C_4H_{10}S$)	87.8	85	87.0	-

Propylsulfide ($C_6H_{14}S$) (b.t.=141.5) + Alcohols.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Isoamyl alcohol	($C_5H_{12}O$)	131.9	79	130.5	-3.0 (70%)
Ethoxyglycol	($C_4H_{10}O_2$)	135.3	52	130.2	-
Methyl-lactate	($C_4H_8O_3$)	143.8	40	138.0	-
Ethylene-chlorhydrin	(C_2H_5OCl)	128.6	67	125.5	-2.0 (90%)
Ethanol-amine	(C_2H_7ON)	170.8	13	139.7	-

Isopropylsulfide ($C_6H_{14}S$) (b.t.=120.5) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	
Butyl alcohol	($C_4H_{10}O$)	117.8	45	112.0	
Isobutyl alcohol	($C_4H_{10}O$)	108.0	73	105.8	
Ethylene-chlorhydrine	(C_2H_5OCl)	128.6	30	115.5	

Butyl sulfide ($C_8H_{18}S$) + Isobutyl lactate ($C_7H_{14}O_3$)

Lecat, 1949

%	b.t.
0	185.0
78	181.3 Az
100	182.15

Butyl sulfide ($C_8H_{18}S$) + Ethanol amine (C_2H_7ON)

Lecat, 1949

%	b.t.
0	185.0
53	164.5 Az
100	170.8

Isobutylsulfide (C_4H_9S) (b.t.=172.0) + Alcohols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b.t.	%	b.t.
Butoxy glycol	$C_6H_{14}O_2$	171.15	42	163.8
Propyl-lactate	$C_6H_{12}O_3$	171.7	48	169.0
Ethanol-amine	C_2H_7ON	170.8	33	156.0

Allylsulfide ($C_6H_{10}S$) (b.t.=139.35) + Alcohols

Lecat, 1949

2nd Comp.			Az		Dt min
Name	Formula	b.t.	%	b.t.	
Amyl alcohol	$C_5H_{12}O$	138.2	42	134.5	-
Isoamyl alcohol	$C_5H_{12}O$	132.9	78	130.5	-2.0 (80%)
Cyclopentanol	$C_5H_{10}O$	140.85	33	135.5	-
Methoxy-glycol	$C_3H_8O_2$	124.5	75	122.5	-
Propoxy-glycol	$C_5H_{12}O_2$	151.35	20	137.5	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	61	124.5	-
Ethylene bromhydrin	C_2H_5OBr	150.2	20	135.5	-
Ethanol-amine	C_2H_7ON	170.8	8	137.2	-

Methoxytrimethyl silane ($C_4H_{12}OSi$)
+ Methyl alcohol (CH_3O)

Lecat, 1949

%	b.t.
0	57
15	50 Az
100	64.65

 $C_9H_{20}S_4 + C_{13}H_{28}S_4$

Timmermans, 1957.

%	f.t.	E
0	- 14	-
20	- 25	- 67
40	- 50	"
60	- 62.3	"
80	- 46	-
100	- 36.5	-
tr.t.	- 63	-

Ethoxytrimethyl silane ($C_5H_{14}OSi$) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b.t.
0	75
-	66 Az
100	78.3

Diethoxydimethyl silane ($C_6H_{16}O_2Si$) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b.t.
0	114.0
83	77 Az
100	78.3

Butoxytrimethyl silane ($C_7H_{18}OSi$) + Butyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b.t.
0	124
42	111 Az
100	117.8

Chlorethyltrimethyl silane ($C_5H_{13}ClSi$) +
Ethylenechlorhydrin (C_2H_5OCl)

Lecat, 1949

%	b.t.
0	134.3
-	120 Az
100	128.6

Methylisobornylether ($C_{11}H_{20}O$) (b.t.=192.4) + Alcohols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Octyl alcohol	($C_8H_{18}O$)	195.2	30	191.9
Glycol	($C_2H_6O_2$)	197.4	27	171.5
Glycerol	($C_3H_8O_3$)	190.5	7.5	192.0
Diglycol	($C_4H_{10}O_3$)	245.5	9	191.0
Methoxy-diglycol	($C_5H_{12}O_3$)	192.95	50	187.5
Ethoxy-diglycol	($C_6H_{14}O_3$)	201.9	25	190.5
Glycol-monoacetate	($C_4H_8O_3$)	190.9	60	185.0
Ethanol-amine	(C_2H_7ON)	170.8	62	165.0

Ethylbornylether ($C_{12}H_{22}O$) (b.t.=204.9) + alcohols
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Glycol	($C_2H_6O_2$)	197.4	34	177.0
Glycerol	($C_3H_8O_3$)	290.5	5	203.5
Benzyl alcohol	(C_7H_8O)	205.25	50	203.0

Ethylisobornylether ($C_{12}H_{22}O$) (b.t.=203.8) + Alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	(C ₂ H ₆ O ₂)	197.4	33	176.5	-
Benzyl alcohol	(C ₇ H ₈ O)	205.25	39	201.0	-2.2 (40%)
Ethoxydi glycol	(C ₆ H ₁₄ O ₃)	201.9	55	198.5	-

Methylterpenylether ($C_{11}H_{18}O$) (b.t.=216.2) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	($C_2H_6O_2$)	197.4	38	183.5	-
Glycerol	($C_3H_8O_3$)	290.5	3	224.0	-
Borneol	($C_{10}H_{18}O$)	225.0	25	214.0	-
Menthol	($C_{10}H_{20}O$)	219.4	10	-	-1.2
			20	215.5	-
Terpinol-β	($C_{10}H_{18}O$)	210.5	82	210.0	-
			90	-	-
Benzyl-carbinol	($C_8H_{10}O$)	219.4	10	-	-
			20	-	-
Diglycol	($C_4H_{10}O_3$)	245.5	20	210.5	-
Dipropylene-glycol	($C_6H_{14}O_3$)	229.2	24	211.5	-

Anisole (C_7H_8O) + Methyl alcohol (CH_4O)

Baker, 1912

%	d	η	%	d	η
100	0.7884	554.1	32.38	0.9177	756.3
84.89	.8147	586.3	21	.9426	809.5
70.60	.8411	622.6	10.27	.9655	886.1
57.09	.8671	662.2	0	.9909	1010
44.40	.8926	706.8			

Anisole (C_7H_8O) + Ethyl alcohol (C_2H_6O)

Piatti, 1930-31

mol%	b.t.	mol%	b.t.
0	153.9	60	83.9
10	130.2	70	82.2
20	106.4	80	80.9
30	92.9	90	79.3
40	87.2	100	78.3
50	85.6		

Baker, 1912

%	d	η	%	d	η
100	0.7879	1113	32.32	0.9167	903.9
84.79	.8147	1045	20.95	.9415	904.5
70.38	.8405	989.5	10.02	.9660	924.3
57	.8665	947.4	0	.9960	1008
44.33	.8918	918.4			

Piatti, 1930-31					
mol%	0°	10°	η 20°	30°	40°
0	1780	1510	1320	1210	1120
10	1740	1470	1280	1170	1080
20	1700	1450	1250	1130	1050
30	1670	1430	1230	1110	1030
40	1660	1410	1210	1090	1010
50	1650	1400	1200	1070	971
60	1690	1410	1210	1075	970
70	1740	1430	1220	1076	962
80	1790	1460	1240	1078	959
90	1860	1500	1260	1079	935
100	1920	1570	1280	1080	925

Anisole (C ₇ H ₈ O) (b.t.=153.85) + Alcohols Lecat, 1949					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Hexyl alcohol	(C ₆ H ₁₄ O)	157.85	34 36.5	- 151.0	-4.8 -
Glycol	(C ₂ H ₆ O ₂)	197.4	11.5	150.45	134.5
Pinacol	(C ₆ H ₁₄ O ₂)	174.35	4	153.4	-
Ethoxy- glycol	(C ₄ H ₁₀ O ₂)	135.3	50 94	- 135.25	-1.1 -
Propoxy- glycol	(C ₅ H ₁₂ O ₂)	151.35	56 85	148.15 -	- -0.6
Methyl- lactate	(C ₄ H ₈ O ₃)	143.8	80 82	- 142.5	-1.3 -
Ethyl- lactate	(C ₅ H ₁₀ O ₃)	154.1	40 44.5	- 150.1	-1.8 -
Cyclo- hexanol	(C ₆ H ₁₂ O)	160.8	29 35	152.3 -	- -4.8
Ethylene- chlorhydrine	(C ₂ H ₅ OC1)	128.6	59 97.5	- 128.55	-2.6 -
Dichlor- ethanol	(C ₂ H ₄ OC1 ₂)	146.2	-	145.5	76
Ethanol- amine	(C ₂ H ₇ ON)	170.8	25.5	145.75	-
Diethyl- ethanolamine	(C ₆ H ₁₅ ON)	162.2	19	143.0	-

Anisole (C ₇ H ₈ O) + Glycerol (C ₃ H ₈ O ₃) Mc Ewen, 1923			
%	sat.t.	%	sat.t.
9.88	230.5	55.98	274.5
21.20	263.5	72.32	250.5
30.54	273.5	89.71	185.5
46.59	275.5	93.93	161.5

Anisole (C ₇ H ₈ O) + Methyl malate 1 (C ₆ H ₁₀ O ₅) Grossmann and Landau, 1910						
g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
50.639	-4.54	-5.35	-6.24	-6.91	-7.21	-7.31
25.3195	-3.67	-4.27	-4.50	-4.79	-4.82	-
12.6598	-2.61	-3.24	-2.92	-2.29	-2.29	-
4.907	-1.43	-1.63	-1.63	-1.43	-1.02	-0.20
2.4535	-1.22	-1.22	-0.82	-0.41	0.00	-

Anisole (C ₇ H ₈ O) + Methyl tartrate (C ₆ H ₁₀ O ₆) Yen-ki-Heng, 1936				
t	d	(α)		
		Hg y	Hg g	Hg i
19.360 g/ 100 cc				
0	1.0703	-14.32	-17.51	-87.51
15	.0604	12.01	14.78	-
28.5	.0515	9.37	11.81	-
38	.0452	7.76	10.34	-
48	.0386	6.41	8.52	26.82
58	.0320	5.07	6.91	24.23
71.5	.0231	3.54	4.88	20.97
78	.0190	2.88	4.49	19.29

Lowry and Abram, 1915		
w.l. (Å)	(α)	100%
20g/100cc		
20°		
6438	-7.20	+2.65
5780	11.00	+2.05
5461	13.80	+1.28
4800	23.68	-2.47
4358	37.08	-8.93

Anisole (C_7H_8O) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t	d	t	d
9.99%		24.62%	
17.5	1.0142	14.9	1.0424
25.4	1.0064	32.5	1.0261
		45.5	1.0130
		55.5	1.0933
49.85%		100%	
15.8	1.0933	16.8	1.2087
25.6	1.0835	37.2	.1878
		46.8	.1783
		58.3	.1665
		68.1	.1566
		76.2	.1484
		99.4	.1248

t	(α) _D	t	(α) _D
9.99%		24.62%	
18.2	4.27	14.6	6.24
20	4.5	20	6.8
27.3	5.34	33.2	8.20
35.2	6.25	46.8	9.75
		52.9	10.15
		68.9	12.11
		72.8	12.41
49.85%		100%	
19	7.96	1.8	6.63
20	8.1	11.3	6.66
30.6	9.12	16	7.21
		20.1	7.67
		25.1	8.25
		29.9	8.70
		33.7	9.10
		37.6	9.56
		46.1	10.24
		46.1	10.94
		55.1	11.75
		67.2	12.30
		77.1	12.30
		84.4	12.73
		89.4	12.97
		100	13.47

Rule, Barnett and Cunningham, 1933

mol %	α 5461	mol %	α 5461
20°			
2.8	0.077	46.8	5.747
3.6	0.195	63.3	6.822
12.2	1.257	70.1	7.275
22.5	2.192	76.5	7.952
38.7	3.970		

Phenetole ($C_8H_{10}O$) + Methyl alcohol (CH_4O)

Baker, 1912

%	d	η
25°		
100	0.7879	553.5
85.17	.8107	595.7
71.07	.8331	640.6
57.76	.8555	695.4
45.12	.8771	757.2
33.00	.8987	816
21.43	.9212	894
0.00	.9622	1142

Phenetole ($C_8H_{10}O$) + Ethyl alcohol (C_2H_6O)

Baker, 1912

%	d	η
25°		
100	0.7879	1113
85.03	.8106	1067
71.11	.8329	1035
57.68	.8551	1010
45.05	.8766	997
34.95	.8981	991
21.50	.9194	1000
9.75	.9421	1035
0	.9619	1135

Phenetole ($C_8H_{10}O$) (b.t.=170.45) + Alcohols
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	($C_6H_{14}O$)	157.85	75 80	- 157.55	-2.3 -
Heptyl alcohol	($C_7H_{16}O$)	176.15	10 30	- 168.8	-1.1 -
Glycol	($C_2H_6O_2$)	197.4	19	161.45	-
Pinacol	($C_6H_{14}O_2$)	174.35	33	165.25	-
Cyclohexanol	($C_6H_{12}O$)	160.8	72 75	159.5 -	- -2.1
Butoxyglycol	($C_6H_{14}O_2$)	171.15	50 52	- 167.1	-0.9 -
Propyl lactate	($C_6H_{12}O_3$)	171.7	50	167.1	-1.8
Methylcyclohexanol-1,2	($C_7H_{14}O$)	168.5	50 56	- 165.7	-2.7 -
Methylcyclohexanol-1,3	($C_7H_{14}O$)	171.2	-	167.3	-
Furfuryl alcohol	($C_5H_6O_2$)	169.35	25 46	- 166.0	-2.0 -
Ethyleniodhydrin	(C_2H_5OI)	176.5	38	166.0	-
Dichloropropanol-2	($C_3H_6OCl_2$)	175.8	20 37	- 168.8	-2.9 -
Ethanolamine	(C_2H_7ON)	170.8	30	151.0	-

Phenetole ($C_8H_{10}O$) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
49.537	-5.55	-6.06	-7.67	-8.78	-9.59	-9.99
24.7685	-5.21	-6.02	-7.43	-8.60	-9.08	-
12.3843	-5.09	-5.98	-7.35	-8.48	-8.96	-
4.903	-5.10	-6.32	-7.75	-8.97	-9.99	-10.81
2.4515	-5.30	-7.34	-11.42	-13.05	-14.28	-

Phenetole ($C_8H_{10}O$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t		(α) _D	t		(α) _D
9.99%			24.96%		
19.5	7.72		19.2	7.23	
20	7.75		20	7.32	
22.1	8.00		31.6	8.79	
27.1	8.41		43.5	10.14	
36.5	9.58		50.5	10.92	
51.73%					
18.2	6.72				
20	6.86				
31.0	8.05				
t		d	t		d
9.99%			24.96%		
18.6	0.9862		17.9	1.0161	
25.8	0.9794		28.1	1.0071	
			38.3	0.9969	
			48.4	0.9869	
51.73%			100%		
17.7	1.0772		see Benzene +		
26.5	1.0693		Ethyl tartrate		

Lecat, 1949

Propylphenylether ($C_9H_{12}O$) (b.t.=190.5) + Alcohols

2 nd comp.		Az	
Name	Formula	b. t.	%
Octyl alcohol	($C_8H_{18}O$)	195.2	12
Glycol	($C_2H_6O_2$)	197.4	26
Glycerol	($C_3H_8O_3$)	290.5	8
Ethanolamine	(C_2H_7ON)	170.8	55

Veratrole ($C_8H_{10}O_2$) + Ethyl alcohol (C_2H_6O)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1)	σ
		17°	
20	18.1	2.5	0.53
33	24.6	2.0	0.48
50	27.0	1.7	0.45
66	30.3	1.4	0.43
75	31.7	1.3	0.41

Paterno, 1895

%	f.t.	%	f.t.
0	22.53	6.23	16.23
0.53	21.09	9.06	14.69
1.21	21.09	12.01	13.21
2.21	20.03	15.12	12.01
4.17	17.84	19.28	10.73

Veratrole ($C_8H_{10}O_2$) + Diethyl glycerol ($C_7H_{16}O_3$)

Paterno, 1895

%	f.t.	%	f.t.
0	22.53	5.30	20.35
0.59	22.245	8.40	10.23
1.27	21.96	18.26	15.85
2.05	21.64	27.18	12.74
3.14	21.20		

Veratrole ($C_8H_{10}O_2$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.
0	206.8
38	178.4 Az
100	197.4

Veratrole ($C_8H_{10}O_2$) + Benzyl alcohol (C_7H_8O)

Paterno, 1895

%	f.t.	%	f.t.
0.0	22.53	7.30	18.42
0.60	22.17	9.09	16.92
1.80	21.42	11.50	14.85
3.67	20.39	13.99	14.57
5.42	19.45	17.35	13.85

Lecat, 1949

%	b.t.
0	206.8
50	202.5 Az
100	205.25

Dimethylresorcinol ether ($C_8H_{10}O_2$) (b.t.=214.7)
+ Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	($C_2H_6O_2$)	197.4	43	183.7	-
Glycerol	($C_3H_8O_3$)	290.5	7	212.5	-
Borneol	($C_{10}H_{18}O$)	215.0	-	214.3	-
Benzyl alcohol	(C_7H_8O)	205.25	50	202.5	-
Terpineol	($C_{10}H_{16}O$)	218.85	10	-	-0.2
-a			30	214.0	-

Diethylresorcinol ether ($C_{10}H_{14}O_2$) (b.t.=235.4) +
Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	
Decyl alcohol	($C_{10}H_{22}O$)	232.8	18	232.4	
Glycol	($C_2H_6O_2$)	197.4	53	191.0	
Phenyl-propanol	($C_9H_{12}O$)	235.6	43	234.8	

Methyl-p-cresylether ($C_8H_{10}O$) (b.t.= 177.05) + Alcohols Lecat, 1949						Methyleugenyl ether ($C_{11}H_{12}O_2$) (b.t.=254.7) + Alcohols Lecat, 1949					
2 nd comp.			Az			2 nd comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.	Name	Formula	b.t.	%	b.t.	Sat.t.
Heptyl alcohol	($C_7H_{16}O$)	178.15	52	173.3	-	Glycol	($C_2H_6O_2$)	197.4	68.5	195.1	144
Isooctyl alcohol	($C_8H_{18}O$)	180.4	30	176.4	-1.0	Glycerol	($C_3H_8O_3$)	290.5	18	248.0	-
Glycol	($C_2H_6O_2$)	197.4	22.8	166.6	160	Diglycol	($C_4H_{10}O_3$)	245.5	47	235.0	-
Pinacol	($C_4H_{10}O_2$)	174.35	40	169.5	-	Dipropylenglycol	($C_6H_{14}O_3$)	229.2	65	226.5	-
Butoxyglycol	($C_6H_{14}O_2$)	171.15	63	169.3	-	Diethanolamine	($C_4H_{11}O_2N$)	268.0	-	247.0	-
Propyl-lactate	($C_6H_{12}O_3$)	171.7	82	171.0	-	Methylisoeugenyl ether ($C_{11}H_{12}O_2$) (b.t.=270.5) + Alcohols Lecat, 1949					
Cyclohexanol	($C_6H_{12}O$)	160.8	92	160.55	-	2 nd comp.			Az		
Methylcyclohexanol	($C_7H_{14}O$)	168.5	79	167.6	-	Name	Formula	b.t.	%	b.t.	
Dichlor 1,3 propanol 2	($C_3H_6OCl_2$)	175.8	59 76	173.1 -	- -1.6	Glycol	(C_2H_6O)	197.4	79	196.0	
Dichlor 1,2 propanol 3	($C_3H_6OCl_2$)	182.5	32	175.5	-	Glycerol	($C_3H_8O_3$)	290.5	25	258.4	
Ethanolamine	(C_2H_7ON)	170.8	37	154.5	-	Diglycol	($C_4H_{10}O_3$)	245.5	60	238.8	
Methyl thymol ether ($C_{11}H_{16}O$) (b.t.=216.5) + Alcohols Lecat, 1949						o-Bromanisole (C_7H_7OBr) + Diglycol ($C_4H_{10}O_3$) Lecat, 1949					
2 nd comp.			Az			%			b.t.		
Name	Formula	b.t.	%	b.t.		0			217.7		
Glycol	($C_2H_6O_2$)	197.4	40	183.0		25			211.0		
Terpineol- α	($C_{10}H_{18}O$)	218.85	-	215.5		100			245.5		
Borneol	($C_{10}H_{18}O$)	215.0	62	214.0		o-Bromanisole (C_7H_7OBr) + Dipropylenglycol Lecat, 1949 ($C_6H_{14}O_3$)					
Benzylcarbinol	($C_8H_{10}O$)	219.4	30	215.0		%			b.t.		
Diglycol	($C_4H_{10}O_3$)	245.5	19	210.5		0			217.7		
Dipropylenglycol	($C_6H_{14}O_3$)	229.2	30	211.0		30			212.0 Az		
p-Bromphenetole (C_8H_9OBr) + Dipropylenglycol Lecat, 1949 ($C_6H_{14}O_3$)						100			229.2		
%			b.t.			p-Bromphenetole (C_8H_9OBr) + Dipropylenglycol Lecat, 1949 ($C_6H_{14}O_3$)					
0						%			b.t.		
45						0			234.2		
100						45			221.0 Az		
						100			229.2		

p-Bromophenetole (C_6H_5OBr) + Diglycol ($C_4H_{10}O_2$)

Lecat, 1949

%	b.t.
0	234.2
32	222.0 Az
100	245.5

Anethole ($C_{10}H_{12}O$) + Menthol ($C_{10}H_{20}O$)

Scheuer, 1910

%	mol%	f.t.	E
0	0	21.3	-
0.58	0.55	21.05	-
2.06	1.95	20.45	-
3.05	2.77	20.1	-
4.94	4.70	19.35	-
6.69	6.37	18.85	-
7.94	7.57	18.4	-
9.53	9.10	18.0	-
12.33	11.77	17.25	-
15.60	14.06	16.7	-
18.48	17.70	16.0	-
21.63	20.75	15.45	-
23.87	22.92	15.05	-
30.01	28.40	14.35	-
35.36	34.16	13.9	13.9
35.80	34.59	13.9	13.9
36.48	36.49	14.9	-
39.44	38.18	15.55	-
41.03	39.76	16.25	-
41.66	40.38	16.50	-
43.23	41.94	17.2	-
43.55	42.25	17.35	-
46.54	45.23	18.3	-
47.74	46.41	18.8	-
51.60	50.27	20.15	-
53.35	52.03	20.75	-
54.15	52.83	21.05	-
55.39	54.08	21.5	-
58.84	57.55	22.8	-
59.34	58.05	23.0	-
61.28	60.01	23.7	-
63.14	61.89	24.35	-
64.42	63.20	24.85	-
64.67	63.45	24.95	-
67.22	66.04	25.9	-
67.82	66.65	26.15	-
72.17	71.10	27.70	-
73.36	72.31	28.2	-
77.74	76.81	30.1	-
91.30	90.49	31.8	-
82.72	91.95	32.5	-
94.67	93.97	33.55	-
86.32	95.68	34.5	-
97.87	97.30	35.3	-
99.34	98.83	36.05	-
91.49	91.07	37.3	-
93.40	93.06	38.3	-
95.11	94.86	39.25	-
97.19	97.05	40.4	-
100.00	100.00	42.0	-

Scheuer, 1910

%	mol%	d	n	d	n
		82.2°		99.0°	
0	0	0.9366	812	0.9224	512
9.90	9.44	.9272	799	.9126	601
34.60	33.41	.9007	857	.8875	660
53.01	51.69	.8841	901	.8700	609
67.87	66.71	.8727	980	.8588	675
84.85	84.94	.8601	1432	.8469	915
100	100	.8496	1850	.8372	1041
		55.6°		74.6°	
0	0	0.9605	1287	0.9436	918
9.90	9.44	.9508	1275	.9345	901
34.60	33.41	.9234	1461	.9103	1099
53.01	51.69	.9072	1659	.8906	989
67.87	66.71	.8943	2129	.8803	1185
84.85	84.94	.8811	3510	.8668	1811
100	100	.06290	6290	.8551	2469

%	r ²	D	g	gr
76.75°				
9.90	-37.333	-46.396	-48.230	-54.812
34.60	-38.258	-47.859	-50.027	-58.166
53.01	-38.816	-48.739	-51.001	-57.869
67.87	-39.089	-49.115	-51.217	-58.092
84.85	-39.405	-49.503	-51.645	-58.520
100	-40.149	-50.155	-52.385	-59.419

%	b ²	db	v
9.90	-75.097	-89.512	-90.559
34.60	-78.753	-93.503	-93.913
53.01	-80.029	-94.207	-95.688
67.87	-79.875	-96.364	-97.289
84.85	-82.056	-97.592	-98.584
100			

%	r	D	g	gr
(α) ^{mol}				
9.90	-58.296	-72.448	-75.314	-85.590
34.60	-59.740	-74.733	-78.118	-90.827
53.01	-60.612	-76.107	-79.638	-90.364
67.87	-61.039	-76.694	-79.977	-90.711
84.85	-62.821	-77.300	-80.645	-91.381
100	-62.695	-78.318	-81.801	-92.784

%	b ²	db	v
(α) ^{mol}			
9.90	-117.27	-139.77	-141.41
34.60	-122.97	-146.01	-146.65
53.01	-123.30	-147.11	-149.42
67.87	-124.97	-148.93	-150.01
84.85	-124.73	-150.47	-151.92
100		-152.39	-153.94

r² = pale red, g = yellow, gr = green,b² = pale blue, db = indigo blue, v = violet

Anethole ($C_{10}H_{12}O$) + Ethyl alcohol (C_2H_6O)

Weissenberger, Schuster and Mayer, 1924

mol%	p
18°	
20	22
33.3	29
50.0	32
66.7	34
75.0	35

mol%	η	(water=1)	σ
18°			
0	2.9		0.594
33.3	2.4		.397
50.0	1.8		.342
60.0	1.7		.339
66.7	2.1		.336
90.0	1.7		.326

Anethole ($C_{10}H_{12}O$) (b.t.=235.7) + Alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Decyl-alcohol	($C_{10}H_{22}O$)	232.8	22	232.6	-
Glycol	($C_2H_6O_2$)	197.4	56	189.35	-
Glycerol	($C_3H_8O_3$)	290.5	14	230.8	-
Diglycol	($C_4H_{10}O_3$)	245.5	38	224.1	108
Dipropylene-glycol	($C_6H_{14}O_3$)	229.2	48	221.5	-
Methoxy-triglycol	($C_7H_{16}O_3$)	245.25	30	233.0	-
Phenyl-propanol	($C_9H_{12}O$)	235.6	48	234.0	-

Isoanethole ($C_{10}H_{12}O$) (b.t.=215.6) + Alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	
Glycol	($C_2H_6O_2$)	197.4	40	182.3	
Diglycol	($C_4H_{10}O_3$)	245.5	20	210.0	
Glycerol	($C_3H_8O_3$)	290.5	7.5	213.5	
Ethoxy-diglycol	($C_6H_{14}O_3$)	201.9	87	201.0	

Diphenyl ether ($C_{12}H_{10}O$) (b.t.=259.0) + Alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Glycol	($C_2H_6O_2$)	197.4	61	193.05	-
Glycerol	($C_3H_8O_3$)	290.5	22	247.6	-
Diglycol	($C_4H_{10}O_3$)	245.5	49.4	234.4	116
Dipropyl-englycol	($C_6H_{14}O_3$)	229.2	77	228.0	-
Triglycol	($C_6H_{14}O_4$)	265.2	15	258.2	-
Methoxy-triglycol	($C_7H_{16}O_3$)	245.25	80	243.0	-
Benzyl-glycol	($C_9H_{12}O_2$)	265.2	15	258.2	-
Diethanol-amine	($C_4H_{11}O_2N$)	268.0	-	250.0	-

Diphenyl ether ($C_{12}H_{10}O$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t	α_D
24.58%	
18.7	1.824
20	1.95
51.8	2.68
66.0	2.92
76.3	3.288

Phenylbenzyl ether ($C_{13}H_{12}O$) (b.t.=286.5) +
Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	
Glycol	($C_2H_6O_2$)	197.4	87	195.5	
Glycerol	($C_3H_8O_3$)	290.5	30	264.5	
Diglycol	($C_4H_{10}O_3$)	245.5	80	241.5	
Triglycol	($C_6H_{14}O_4$)	288.7	40	280.0	

Methylbenzylether (C ₈ H ₁₀ O) (b.t.=167.8)+Alcohols Lecat, 1949						Ethylbenzyl ether (C ₉ H ₁₂ O) + Ethyl tartrate (C ₈ H ₁₄ O ₆) Patterson and Stevenson, 1912					
2 nd comp.			Az			t		α _D			
Name	Formula	b.t.	%	b.t.	Dt mix	20.73%					
Hexyl alcohol	(C ₆ H ₁₄ O)	157.85	73 10	156.7 -	- -2.5	13	2.175				
Heptyl alcohol	(C ₇ H ₁₆ O)	176.15	20	167.0	-	20	.26				
Glycol	(C ₂ H ₆ O ₂)	197.4	18	159.8	-	26.5	.39				
Pinacol	(C ₆ H ₁₄ O ₂)	174.35	28	163.5	-	36.3	.57				
Butoxy-glycol	(C ₆ H ₁₄ O ₂)	171.15	40 43	- 165.0	-0.7 -	42.5	.825				
Glycol-mono-acetate	(C ₈ H ₈ O ₃)	190.9	10 -	- 167.0	-1.4 -						
Propyl-lactate	(C ₆ H ₁₂ O ₃)	171.7	25	165.5	-						
Cyclo-hexanol	(C ₆ H ₁₂ O)	160.8	62 90	159.0 -	-1.0 -						
Methyl-cyclohexanol	(C ₇ H ₁₄ O)	168.5	46 50	165.0 -	- -2.7						
Ethylen-iodhydrin	(C ₂ H ₅ OI)	176.5	40	164.0	-						
Dichlor-1,3-propanol-2	(C ₃ H ₆ OCl ₂)	175.8	-	167.0	-						
Ethanol-amine	(C ₂ H ₇ ON)	170.8	28	150.5	-						
Ethylbenzylether (C ₉ H ₁₂ O) (b.t.=185.0) + Alcohols Lecat, 1949						Dibenzyl ether (C ₁₄ H ₁₄ O) (b.t.=297) + Alcohols Lecat, 1949					
2 nd comp.			Az			2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix	Name	Formula	b.t.	%	b.t.	
Isooctyl-alcohol	(C ₈ H ₁₈ O)	180.4	74	180.0	-	Glycol	(C ₂ H ₆ O ₂)	197.4	96	196.5	
Glycol	(C ₂ H ₆ O ₂)	197.4	74	169.0	-	Glycerol	(C ₃ H ₈ O ₃)	290.5	36	269.5	
Pinacol	(C ₆ H ₁₄ O ₂)	174.35	62	171.5	-	Diglycol	(C ₄ H ₁₀ O ₃)	245.5	87	243.8	
Methoxy-diglycol	(C ₅ H ₁₂ O ₃)	192.95	-	183.2	-						
Glycol-mono-acetate	(C ₈ H ₈ O ₃)	190.9	35 50	180.5 -	- -2.5						
Isobutyl-lactate	(C ₇ H ₁₄ O ₃)	182.15	75	181.0	-						
Dichlor 1,2-propanol 3	(C ₃ H ₆ OCl ₂)	182.5	53	180.0	-						

t		α _D			
24.84%					
16.4	2.995				
20	3.07				
27.6	3.205				
32.2	3.35				
40.9	3.535				

Safrole ($C_{10}H_{10}O_2$) (b.t.=235.9) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Glycol	($C_2H_6O_2$)	197.4	55	190.05	187.5
Glycerol	($C_3H_8O_3$)	290.5	14.5	231.2	-
Diglycol	($C_4H_{10}O_3$)	245.5	33	225.5	84.5
Dipropylene- glycol	($C_6H_{14}O_3$)	225.2	50	222.0	-
Methoxy- triglycol	($C_7H_{16}O_3$)	245.25	31	233.5	-
Phenyl- propanol	($C_9H_{12}O$)	233.8	50	235.6	-2.5

Isosafrole ($C_{10}H_{10}O_2$) (b.t.=252.0) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Glycol	($C_2H_6O_2$)	197.4	64	192.8	172
Glycerol	($C_3H_8O_3$)	290.5	18	243.9	-
Diglycol	($C_4H_{10}O_3$)	245.5	44	233.2	84.2
Dipropylene- glycol	($C_6H_{14}O_3$)	229.2	60	225.5	-
Methoxy- triglycol	($C_7H_{16}O_3$)	245.25	65	241.5	-
Phenoxy- glycol	($C_8H_{10}O_2$)	245.2	68	244.5	-
Diethanol- amine	($C_4H_{11}O_2N$)	263.0	-	246.0	-

Safrole ($C_{10}H_{10}O_2$) + Citronellol ($C_{10}H_{20}O$)

Brauer, 1929

wt%	mol%	b.t.	wt%	mol%	b.t.
10 mm					
0	0	105.2	70	70.8	104.7
10	10.4	103.7	90	90.3	107.5
30	30.8	102.3	Az	100	108.0
50	51.0	102.4			

Safrole ($C_{10}H_{10}O_2$) + Borneol ($C_{10}H_{18}O$)

Brauer, 1929

wt%	mol%	b.t.	wt%	mol%	b.t.
10 mm					
0	0	105.2	30	20.8	98.5
10	10.5	103.2	100	100	103.2

Safrole ($C_{10}H_{10}O_2$) + Terpeneol ($C_{10}H_{18}O$)

Brauer, 1929

wt%	mol%	b.t.	wt%	mol%	b.t.
10 mm					
100	100	96.5	30	31.1	100.1
90	90.4	96.4	Az	10	103.2
70	71.0	96.5	0	0	105.2
50	51.3	97.8			

Safrole ($C_{10}H_{10}O_2$) + Benzyl alcohol (C_7H_8O)

Brauer, 1929

wt%	mol%	b.t.	wt%	mol%	b.t.
10 mm					
0	0	105.2	70	77.8	92.3
10	14.3	101.0	90	93.1	91.7
30	39.1	95.5	100	100.0	91.7
50	60.0	93.5			

FURANE + METHYL ALCOHOL

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Furane (C_4H_4O) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.
0	31.7
7	30.5 Az
100	64.65

Methyl furane (C_5H_6O) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b.t.
0	63.8
22.3	51.5 Az
100	64.65

Methyl furane (C_5H_6O) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b.t.
0	63.8
15	60.5 Az
100	78.3

Dioxane ($C_4H_8O_2$) + Methyl alcohol (CH_4O)

Padgitt, Amis and Hughes, 1942

% L V b.t.			% L V b.t.		
100	100	64.60	48.4	72.6	66.94
96.5	98.1	64.72	38.8	72.2	67.10
91.9	94.2	64.90	29.8	70.2	67.60
86.7	91.9	64.96	29.0	67.9	67.89
82.9	89.4	65.10	20.0	66.1	68.20
78.0	86.3	65.27	17.0	63.9	68.50
75.7	85.2	65.34	15.4	62.5	69.30
69.7	81.7	65.55	9.7	59.0	70.40
61.7	77.9	65.78	6.0	52.7	73.20
54.6	75.7	66.50	3.9	44.1	78.20
3.7	30.8	82.80	0.3	1.9	100.38
2.4	19.1	89.20	0.3	1.8	100.54
1.6	11.1	93.50	0.0	0.0	101.05
0.7	8.7	96.04			

Pesce and Lago, 1944

mol % d

25°

100	0.78664
92.63	.82366
84.89	.85605
76.56	.88575
63.54	.92356
51.00	.95250
25.58	.99646
0	1.02802

Herz and Lorentz, 1929

% d
20° 40°

90	0.8167	0.7979
60	.8819	.8623
40	.9248	.8834
30	.9518	.9308
10	1.0082	.9857
0	.0330	1.0111

Harms, 1943

mol % d

22°

100.000	0.78934
92.074	.82889
72.005	.90291
60.881	.93287
45.509	.96637
25.792	.99909
11.081	1.01851
2.359	.02864
0.000	.03124

Herz and Lorentz, 1929.

%	η		σ	
	20°	40°	20°	40°
90	597	466	22.62	20.50
60	631	498	-	22.40
50	664	516	24.47	23.20
40	707	552	25.42	24.32
30	767	598	27.46	25.52
10	1007	786	29.96	27.88
0	1255	1917	35.42	32.54

Anis, Choppin and Padgitt, 1942

%	η				
	10.04°	20.00°	30.00°	40.00°	50.00°
0.000	1594.1	1313.3	1104.0	942.1	819.0
9.392	1180.9	-	875.9	757.2	-
10.635	-	999.2	-	740.1	650.8
19.231	1016.9	868.6	-	-	574.2
20.010	-	-	742.5	643.6	-
30.410	888.2	763.9	-	576.3	509.3
30.5% η	-	-	657.3	-	-
40.792	-	-	605.6	529.4	-
40.925	811.1	697.2	-	-	470.1
49.975	761.2	657.9	-	-	444.9
50.695	-	-	569.4	499.0	-
60.206	724.2	626.8	-	-	424.9
60.624	-	-	545.5	478.2	-
61.735	-	-	543.4	-	-
69.931	700.5	606.9	-	-	410.7
70.353	-	-	528.8	462.7	-
80.058	-	-	517.2	-	-
80.665	684.7	593.5	-	452.0	400.3
90.119	-	-	510.5	-	-
90.569	678.7	587.7	-	446.0	394.9
100.000	678.3	585.8	508.0	443.8	391.3

Pesce and Lago, 1944

mol%	n		
	6678.1Å	5875.6Å	5460.8Å
25°			
100	1.32467	1.32654	1.32783
92.63	.33859	.34054	.34190
84.89	.35092	.35288	.35432
76.56	.36230	.36426	.36581
63.54	.37664	.37884	.38035
51.0	.38780	.39005	.39161
25.58	.40498	.40726	.41092
0	.41753	.41194	.42168
mol%	n		
	5015.7Å	4471.5Å	4358.3Å
100	1.32954	1.33644	1.33321
92.63	.34371	.34660	.34725
84.89	.35619	.36946	.36026
76.56	.36776	.37111	.37196
63.54	.38240	.38590	.38683
51.0	.39366	.39727	.39829
25.58	.41119	.41506	.41602
0	.42399	.42802	.42897

Dioxane ($C_4H_8O_2$) (b.t.=101.35) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Ethyl alcohol	(C_2H_6O)	78.3	90.7	78.13	-
			95	-	-1.5
Propyl alcohol	(C_3H_8O)	97.2	55	95.3	-
			85	-	-5.0
Isobutyl alcohol	($C_4H_{10}O$)	99.5	40	98.8	-6.0
Dimethyl-ethyl carbinol	($C_5H_{12}O$)	102.35	16	-	-4.1
			20	100.6	-

Dioxane ($C_4H_8O_2$) + Ethyl alcohol (C_2H_6O)

Hopkins, Yerger and Lynck, 1939

L	%	V	b.t.	L	%	V	b.t.
100	100	78.32	41.5	60.3	80.18		
98.5	97.8	78.22	35.3	56.7	80.93		
95	94.7	78.19	33.3	54.9	81.32		
90.7	90.7	78.13	31.5	54.5	81.40		
87	88.3	78.17	20.1	43.5	84.42		
83.2	85.2	78.23	15.2	39.7	85.43		
78	81.7	78.35	9.8	29.5	89.08		
68	75.3	78.36	6.7	24	92.02		
58	69.5	79.10	3.7	15	94.89		
46	62.7	79.87	1.2	5.2	99.05		
43.5	61.3	80.15	0	0	101.07		

Herz and Lorentz, 1929

%	d		
	20°	40°	60°
90	0.8107	0.7935	0.7743
60	.8736	.8545	.8359
40	.9218	.9015	.8809
30	.9475	.9271	.9056
10	1.0023	.9860	.9582
0	1.0330	1.0111	.9895

Hopkins, Yerger and Lynck, 1939

mol%	d	mol%	d
25°			
100	0.7852	69.48	0.8808
97.02	.7960	65.62	.8912
94.16	.8067	61.91	.9008
91.07	.8166	55.27	.9172
88.44	.8252	44.11	.9429
84.97	.8361	31.10	.9700
81.66	.8463	17.36	.9966
77.50	.8584	9.12	1.0116
73.22	.8706	0	.0276

Harms, 1938 and 1943				Herz and Lorenz, 1929			
mol%	d	mol%	d	%	σ		
					20°	40°	60°
				10	22.46	21.30	19.00
				40	24.96	22.69	21.97
				50	25.11	23.04	-
				60	26.23	24.45	22.63
				90	30.36	28.56	26.03
				100	35.42	32.54	29.48
Herz and Lorentz, 1929				Hopkins, Yerger and Lynck, 1939			
%	η	%	η	mol%	n_D	mol%	n_D
	20°	40°	60°		25°		
90	979	772	552	100	1.3597	69.48	1.3830
60	871	659	492	97.02	.3619	65.62	.3859
50	897	670	499	94.16	.3648	61.91	.3884
40	915	684	519	91.07	.3671	55.27	.3991
10	1054	821	601	88.44	.3694	44.11	.3991
0	1255	1917	1685	84.97	.3718	31.10	.4058
				81.66	.3745	17.36	.4125
				77.50	.3774	9.12	.4159
				73.22	.3810	0	.4201
Griffiths, 1954				Huet, Philippe and Bono, 1953			
%	d	%	d	mol%	extinction coefficient		
	25°						
100	0.78508	42.64	0.90862	0.0	1.20		
98.76	.78751	39.82	.91565	2.2	0.66		
97.23	.79045	36.74	.92330	10.6	.28		
94.52	.79589	31.0	.93862	23.6	.21		
92.08	.80074	27.94	.94627	36.7	.18		
86.33	.81234	20.87	.96530	69.1	.16		
83.63	.81779	15.74	.97988	72.9	.15		
79.57	.82608	11.07	.99360	87.3	.12		
75.11	.83529	9.09	.99969				
68.74	.84882	6.24	1.00807				
65.13	.85668	4.18	.01480				
58.74	.87082	1.87	.02199				
50.95	.88858	0.80	.02517				
47.88	.89588	0	.02808				
Hopkins, Yerger and Lynck, 1939				Harms, 1938			
mol%	η	mol%	η	mol%	ϵ	mol%	ϵ
	25°				30°		
100	1100	55.27	863	0.0	2.333	42.31	5.996
94.16	992	44.11	885	4.20	2.333	70.41	12.71
88.44	938	31.10	933	9.97	2.692	87.17	13.14
81.66	884	17.36	1029	19.40	3.342	100.00	24.4
73.22	860	0	1184	24.37	3.773		
65.62	849						

Dioxane ($C_4H_8O_2$) + Butyl alcohol ($C_4H_{10}O$)

Mc Cormack, Walkup and Rush, 1956

%		b.t.	%		b.t.
L	V		L	V	
760mm					
0	0	101.1	65.4	48.9	109.3
4.5	3.0	101.5	73.2	55.4	110.55
6.7	4.9	101.8	74.2	57.8	110.8
10.7	7.5	102.2	75.8	59.8	111.25
36.8	22.2	105.0	76.3	62.3	111.65
47.5	31.9	106.25	80.1	67.0	112.3
46.1	31.6	106.5	81.1	67.0	112.65
52.1	33.8	106.95	85.9	75.8	113.8
54.4	38.0	107.35	91.2	85.0	115.1
54.4	38.8	107.4	94.2	90.6	116.0
53.6	37.2	107.55	96.4	94.2	116.5
60.8	43.8	108.5	100	100	117.5
62.2	45.6	108.8			

Rush, Ames, Horst and Mackay, 1956.

mol%	d	n_D	η
25.00°			
0.0	1.0286	1.4200	1165
5.28	1.0148	1.4180	1126
11.48	0.9990	1.4161	1091
19.98	0.9790	1.4140	1078
23.20	0.9720	1.4131	1073
28.77	0.9580	1.4120	1070
32.74	0.9490	1.4108	1074
40.83	0.9308	1.4090	1099
52.80	0.9042	1.4060	1169
67.22	0.8731	1.4032	1328
76.06	0.8545	1.4016	1490
87.30	0.8314	1.3994	1806
96.54	0.8128	1.3980	2264
100.0	0.8060	1.3974	2414

Dioxane ($C_4H_8O_2$) + Isobutyl alcohol ($C_4H_{10}O$)

Rush, Ames, Horst and Mackay, 1956.

mol%	d	n_D	η
25.00°			
0.0	1.0286	1.4200	1165
5.81	1.0127	1.4180	1181
11.55	0.9985	1.4160	1169
16.80	0.9852	1.4144	1099
21.41	0.9740	1.4180	1107
25.89	0.9629	1.4117	1098
28.59	0.9567	1.4110	1107
42.12	0.9241	1.4072	1144
42.44	0.9240	1.4073	1153
49.34	0.9069	1.4054	1206
52.61	0.9003	1.4047	1281
58.35	0.8874	1.4031	1296
68.96	0.8643	1.4008	1489
76.46	0.8480	1.3990	1668
87.50	0.8244	1.3966	2140
95.84	0.8066	1.3949	2787
100.00	0.7980	1.3940	3295

Dioxane ($C_4H_8O_2$) + sec. Butyl alcohol ($C_4H_{10}O$)

Rush, Ames and al.,

mol%	d	n_D	η
25.00°			
0.00	1.0286	1.4200	1165
5.77	1.0125	1.4171	1119
15.69	0.9874	1.4143	1071
25.87	0.9621	1.4112	1046
40.84	0.9270	1.4070	1061
47.94	0.9106	1.4050	1092
58.25	0.8881	1.4026	1173
69.58	0.8635	1.4001	1324
76.40	0.8494	1.3988	1474
87.44	0.8272	1.3969	1880
95.87	0.8106	1.3955	2470
100.00	0.8031	1.3950	2934

Dioxane ($C_4H_8O_2$) + tert. Butyl alcohol
($C_4H_{10}O$)

Rush, Ames and al., 1956.

mol%	d	n_D	η
25.00°			
0.00	1.0286	1.4200	1165
12.14	0.9935	1.4142	1118
14.76	0.9828	1.4128	1110
20.90	0.9689	1.4106	1111
22.22	0.9648	1.4098	1114
33.41	0.9330	1.4054	1134
42.90	0.9105	1.4019	1197
53.05	0.8854	1.3980	1304
63.53	0.8605	1.3948	1496
72.83	0.8391	1.3920	1773
82.24	0.8190	1.3892	2179
91.22	0.7988	1.3870	2941
100.00	0.7806	1.3849	4999

Getman, 1937

mol%	f.t.	mol%	f.t.
0	11.7	37.05	-3.81
3.23	9.96	46.41	-6.69
3.83	9.65	56.32	-9.01
5.57	8.20	62.47	-6.73
9.16	6.26	67.11	-4.46
9.70	6.35	78.36	+3.37
15.16	2.78	88.74	12.10
27.40	-0.84	100.00	25.43

Dioxane ($C_4H_8O_2$) + Glycol ($C_2H_6O_2$)

Wang, 1940

mol%	d		ϵ	
	15°	30°	15°	30°
0.000	1.03883	1.02205	2.232	2.196
2.442	1.04027	1.02360	2.422	2.375
4.556	1.04151	1.02493	2.609	2.553
6.918	1.04290	1.02643	2.842	2.767
7.776	1.04341	1.02697	2.927	2.834
10.410	1.04496	1.02864	3.227	3.112
14.663	1.04759	1.03153	3.762	3.587
26.676	1.05571	1.04047	5.743	5.392
38.574	1.06384	1.04933	8.598	8.040
58.528	1.07861	1.06557	15.91	15.27
79.775	1.09729	1.08542	28.73	27.97
100.000	1.11605	1.10567	46.66	-

Dioxane ($C_4H_8O_2$) + 1,4 Butanediol ($C_4H_{10}O_2$)

Wang, 1940

mol%	d		ϵ	
	15°	30°	15°	30°
0.000	1.03893	1.02210	2.228	2.209
1.687	.03861	.02197	2.333	2.351
2.749	.03840	.02184	2.493	2.455
4.759	.03801	.02168	2.714	2.659
7.106	.03756	.02150	3.018	2.938
9.099	.03722	.02132	3.290	3.169
18.891	.03355	.02054	4.804	4.316
38.936	.03207	.01883	9.400	8.678
58.721	.02846	.01676	16.37	14.95
80.401	.02391	.01365	24.14	22.00
100.000	.01905	.01000	32.90	30.16

Dioxane ($C_4H_8O_2$) + Glycerol ($C_3H_8O_3$)

Wang, 1940

mol%	d		ϵ	
	15°	30°	15°	30°
0.000	1.03901	1.02220	2.224	2.200
1.468	.04210	.02541	.389	.352
2.436	.04413	.02751	.502	.457
3.935	.04732	.03084	.683	.631
4.810	.04916	.03275	.800	.743
83.715	.22362	.21347		
94.969	.24839	.23858		
100.000	.25890	.24972		

Paraldehyde ($C_6H_{12}O_3$) + Ethyl alcohol (C_2H_6O)

Muchin, 1913

c	d		η
	20°		
0.000	0.7934		1253
0.564	.7948		1252
0.833	.7953		1245
2.256	.7972		1223
4.163	.8006		1175
11.28	.8152		1121
20.84	.8347		1178

c=g paraldehyde in 100cc alcohol

Paraldehyde ($C_6H_{12}O_3$) + Amyl alcohol ($C_5H_{12}O$)

Drucker and Kassel, 1911

%	d		η
	76.5°		
100	0.7656		949
89.98	.7785		821
70.02	.8061		679
50.00	.8366		572
29.99	.8719		502
9.96	.9076		479
0.0	.9248		478
	0°		
100	0.8183		6203
90.00	.8327		4742
70.00	.8659		3107
50.00	.9011		2237
30.05	.9401		1777
10.00	.9822		1551
0.0	1.0037		1528

Lecat, 1949

Paraldehyde ($C_6H_{12}O_3$) (b.t.=124.35) + Alcohols

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	($C_4H_{10}O$)	117.8	52	115.75	-
Isoamyl alcohol	($C_5H_{12}O$)	131.9	22	123.5	-5.0
Pentanol-2	($C_5H_{12}O$)	119.8	52	118.5	-6.3 (50%)
Methoxy glycol	($C_3H_8O_2$)	124.5	38	118.6	-
Ethoxy glycol	($C_4H_{10}O_2$)	135.3	14	123.8	-

Cineole (C ₁₀ H ₁₈ O) (b.t.=176.35) + Alcohols Lecat, 1949					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Heptyl alcohol	C ₇ H ₁₆ O	176.15	20 48	- 173.0	-0.5 -
Isooctyl alcohol	C ₈ H ₁₈ O	180.4	26.5 30	175.85 -	- -0.7
Glycol	C ₂ H ₆ O ₂	197.4	18	164.5	-
Pinacol	C ₆ H ₁₄ O ₂	174.35	45	168.5	-
Butoxy-glycol	C ₆ H ₁₄ O ₂	171.15	50 58.55	- 168.9	+0.1 -
Methoxy-diglycol	C ₅ H ₁₂ O ₃	192.95	27	173.0	-
Ethoxy-diglycol	C ₆ H ₁₄ O ₃	201.9	-	175.5	-
Glycol-mono-acetate	C ₆ H ₁₂ O ₃	190.9	22 50	174.1 -	- -1.2
Cyclo-hexanol	C ₆ H ₁₂ O	160.8	90 92	- 160.65	-0.7 -
Methyl-cyclohexanol	C ₇ H ₁₄ O	168.5	75 76	- 167.4	-1.5 -
Propyl-lactate	C ₆ H ₁₂ O ₃	171.7	73	169.5	-
Isobutyl-lactate	C ₇ H ₁₄ O ₃	182.15	22	175.0	-
Ethanol-amine	C ₂ H ₇ ON	170.8	36		150.4
Diethanol-amine	C ₄ H ₁₁ O ₂ N	162.2	-	158.0	-

Epichlorhydrin (C ₃ H ₅ OCl) (b.t.=116.4) + Alcohols Lecat, 1949					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Propyl alcohol	C ₃ H ₈ O	97.2	77	96.0	-5.7
Butyl alcohol	C ₄ H ₁₀ O	117.8	40 53	- 112.0	-8.0 -
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	40 60.5	- 105.0	-8.5 -
Sec. Butyl alcohol	C ₄ H ₁₀ O	99.5	75	98.0	-
Amyl Alcohol	C ₅ H ₁₂ O	138.2	15	116.2	-1.2
Isoamyl Alcohol	C ₅ H ₁₂ O	131.9	19 50	115.35 -	- -9.0
Tert-Amyl Alcohol	C ₅ H ₁₂ O	102.35	70	100.7	-7.0
Methyl-propyl carbinol	C ₅ H ₁₂ O	119.8	90 40	- 113.0	-3.0 -
Methyl-Isopropyl carbinol	C ₅ H ₁₂ O	112.9	10 52	- 109.5	-3.4 -
Allyl alcohol	C ₃ H ₆ O	96.85	78	95.75	-4.8

Epibromhydrin (C ₃ H ₅ OBr) + Butyl alcohol (C ₄ H ₁₀ O) Lecat, 1949					
% b.t.					
0		138.5			
37		117.5 Az			
100		117.8			

Cineole (C ₁₀ H ₁₈ O) + Terpeneol (C ₁₀ H ₁₈ O) Brauer, 1929					
% b.t. (10mm)					
100		97.2			
70		-			
50		62.			
30		58			
10		55.2			
0		54.6			

Epibromhydrin (C ₃ H ₅ OBr) + Isoamyl alcohol (C ₅ H ₁₂ O) Lecat, 1949					
% b.t.					
0		138.5			
60		129.5 Az			
100		131.9			

Ethylene sulfide (C_2H_4S) + Methyl alcohol
(CH_4O)

Lecat, 1949.

%	b.t.
0	55.7
21	47.0 Az
100	64.65

Thiophene (C_4H_4S) (b.t.=84.7) + Alcohols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Methyl alcohol	(CH_4O)	64.65	55	59.55
Ethyl alcohol	(C_2H_6O)	78.3	45	70.0
Isopropyl alcohol.	(C_3H_8O)	82.4	43	76.0

Hexamethyl disiloxane ($C_6H_{18}OSi_2$) + Trimethylsilanol (C_3H_7OSi)

Lecat, 1949

%	b.t.
0	100
34	90 Az
100	99

Tetrahydrothiophene (C_4H_8S) + Ethylene chlorhydrin
(C_2H_4OCl)

Lecat, 1949.

%	b.t.
0	118.8
28	115.0 Az
100	128.6

Tetrahydrothiophene (C_4H_8S) + Propyl alcohol
(C_3H_8O)

Lecat, 1949

%	b.t.
0	118.8
90	96.5 Az
100	97.2

Ether ($C_4H_{10}O$) + Phenol (C_6H_6O)

Weissenberger, Schuster and Schuler, 1924

mol%	p	mol%	p
15°			
80	8	50.5	43
66.7	15	45.5	54
62.1	22	39.8	68
55.0	33	33.3	85
mol%	η (water=1)		σ
15°			
74.1	4.01	0.416	
65.8	2.69	.409	
61.0	2.14	-	
57.1	-	.392	
49.5	1.33	.372	
40.3	0.87	.349	
33.3	0.64	.333	

Ether ($C_4H_{10}O$) + o-Cresol (C_7H_8O)

Weissenberger and Piatti, 1924

mol%	p	mol%	p
18°			
96.15	5.4	57.47	106.5
89.28	11.1	53.76	149.5
83.33	17.5	51.28	190.1
74.62	26.2	50.00	198.0
66.66	54.7	40.00	236.5
63.63	67.2	33.33	265.8

mol%	η (water=1)	mol%	σ (water=1)
18°		18°	
75.19	4.23	100	0.459
70.42	3.30	69.38	.420
68.96	2.80	50.00	.398
62.33	2.09	41.84	.386
50.00	1.26	33.22	.376
33.22	0.63	26.18	.367
26.18	0.54	19.68	.354
19.68	0.42	14.90	.349
14.90	0.34	0	.226
0	0.24		

Ether ($C_4H_{10}O$) + m-Cresol (C_7H_8O)

Weissenberger and Piatti, 1924

mol%	p	mol%	p
18°			
96.15	6.1	63.63	76.2
89.28	12.2	57.47	120.7
83.33	18.4	53.76	154.6
81.53	18.9	51.28	192.5
74.62	33.8	50.00	199.2
66.66	63.7	33.33	267.5
mol%	η (water=1)	mol%	σ (water=1)
18°			
80.00	4.70	100	0.437
67.29	3.31	80.00	.425
59.81	2.05	64.28	.418
49.76	1.35	56.43	.410
40.92	1.05	49.36	.399
35.47	0.77	40.93	.388
24.53	0.54	31.16	.367
14.22	0.36	24.53	.349
8.13	0.30	8.13	.319
0	0.24	0	.226

Ether ($C_4H_{10}O$) + p-Cresol (C_7H_8O)

Weissenberger and Piatti, 1924

mol%	p	mol%	p
18°			
96.15	5.7	53.76	161.1
89.28	11.6	51.28	188.6
83.33	14.4	50.00	198.1
80.00	14.9	40.00	237.8
74.62	28.3	33.33	268.2
66.66	58.6	28.00	289.8
57.47	118.3	63.66	71.3
mol%	η (water=1)	mol%	σ (water=1)
18°			
85.36	10.85	100	0.437
74.62	4.75	61.47	0.416
64.81	2.48	48.35	0.399
48.35	1.29	39.78	0.383
40.00	0.77	32.08	0.367
32.74	0.62	24.22	0.351
24.22	0.50	18.57	0.334
19.13	0.43	0	0.226
18.57	0.42		
13.76	0.35		
0	0.24		

Ether ($C_4H_{10}O$) + Pyrocatechol ($C_6H_6O_2$)

Walker, Collett and Lazzell, 1931

mol%	f.t.
100.00	104.5
84.53	95.0
73.37	85.6
56.13	60.5
41.03	9.8

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1)	σ
17°			
44	138.7	2.9	0.34
40	161.9	2.4	0.33
34	210.9	-	-
29	245.2	1.0	0.31
22	285.3	0.7	0.30
20	295.1	0.6	0.30
18	300.7	0.5	0.29

Ether ($C_4H_{10}O$) + Resorcinol ($C_6H_6O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1)	σ
17°			
46	112.4	-	0.42
40	150.4	6.0	-
34	195.0	2.8	0.34
25	255.9	1.1	0.30
20	286.6	0.6	0.28
18	-	0.5	0.26

Ether ($C_4H_{10}O$) + Hydroquinone ($C_6H_6O_2$)

Walker, Collett and Lazzell, 1931

mol%	f.t.
100.00	172.9
57.78	145.0
46.06	133.2
35.24	117.3
21.62	89.9

Ether ($C_4H_{10}O$) + Guaiacol ($C_7H_8O_2$)

Weissenberger, Henke and Bregmann, 1925 and
Weissenberger, Henke and Schuster, 1926

mol%	p	η (water=1) ^o	
17°			
80	61.8	3.4	0.54
67	107.2	2.2	0.50
57	145.6	-	-
50	176.0	1.3	0.45
34	245.8	0.7	0.38

Ether ($C_4H_{10}O$) + α -Naphthol ($C_{10}H_8O$)

Higasi, 1934

mol%	ϵ
20°	
0	4.35
7.5	4.98
15.2	5.62
20.6	5.93

Ether ($C_4H_{10}O$) + Salicyl aldehyde ($C_7H_6O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1) ^o	
17°			
80	106.5	1.7	0.71
67	164.6	1.1	0.65
50	234.0	0.8	0.58
40	270.1	0.7	0.55
34	-	0.6	0.53
25	310.0	0.5	0.50
20	326.5	0.4	0.43

Ether ($C_4H_{10}O$) + Methyl salicylate ($C_8H_8O_3$)

Raoult, 1888

%	p	%	p
14°1			
0	345.0	38.6	280.6
2.256	344.6	66.4	207.6
4.20	343.6	87.3	124.9
9.4	332.2	91.4	101.0
17.3	316.2	100	4.0
26.8	301.0		

Ether ($C_4H_{10}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Shakhparonov and Martinova, 1953

mol%	g/l Vap. phase	p
0°		
0	0.808	184.6
2	.7950	181.7
5	.7850	179.1
8	.7670	175.2
10	.7560	172.9
12	.7310	167.2

Carrick, 1922

%	f. t.	%	f. t.
100	44	44.75	15.8
90.23	37.5	37.27	10.5
82.79	33.2	30.95	5.5
71.38	27.8	27.41	1.0
58.12	21.9		

Ether ($C_4H_{10}O$) + m-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f. t.	%	f. t.
100	93	63.89	39.5
91.42	83.0	58.96	26.5
83.58	75.0	55.99	12.2
78.03	68.0	54.17	8.2
72.92	59.0	51.44	0.2
68.02	48.5		

Ether ($C_4H_{10}O$) + p-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f. t.	%	f. t.
100	114	59.89	38.1
90.92	101.9	58.20	31.7
85.51	97.1	57.07	28.7
79.23	87.8	56.74	24.1
71.38	70.5	55.06	18.0
66.89	59.9	53.11	10.1
62.64	46.8	52.31	1.0

Amyl ether ($C_{10}H_{22}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	187.5
78	180.2 Az
100	182.2

Amyl ether ($C_{10}H_{22}O$) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b.t.
0	187.5
18	186.2 Az
100	191.1

Isoamyl ether ($C_{10}H_{22}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	173.2
15	172.2 Az
100	182.2

Isoamyl ether ($C_{10}H_{22}O$) + o-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b.t.
0	173.2
30	171.0 Az
100	176.8

Diethyl-carbitol ($C_8H_{18}O_3$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol%(at b.t.)

L	V
760mm	
20	4
40	18
60	46
71	71
80	88

Diethyl-carbitol ($C_8H_{18}O_3$) + p-Cresol

Othmer, Savitt and al., 1949 (fig.)

mol%(at b.t.)

L	V
760mm	
20	6
40	19
60	48
72	72
80	87

Dichlorethylether ($C_4H_8OCl_2$) + Chlorphenol-o
(C_6H_5OCl)

Lecat, 1949

%	b.t.
0	178.65
86	176.5 Az
100	176.8

Dichlorethylether ($C_4H_8OCl_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	178.65
40	178.2 Az
100	182.2

Butyl sulfide ($C_8H_{18}S$) (b.t.=185.0) + Phenols
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	(C_6H_6O)	182.2	45	177.5
o-Cresol	(C_7H_8O)	191.1	25	183.8
o-Chlor-phenol	(C_6H_5OCl)	176.8	82	175.0

Isobutyl sulfide ($C_8H_{18}S$) (b.t.=172.0) + Phenols
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Phenol	(C_6H_6O)	182.2	28	170.5
o-Chlor-phenol	(C_6H_5OCl)	176.8	28	169.5

Isoamyl sulfide ($C_{10}H_{22}S$) (b.t.=214.8) + Phenols
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Guethol	($C_8H_{10}O_2$)	216.5	-	214.2
p-Ethyl-phenol	($C_8H_{10}O$)	218.8	23	213.5
m-4-Xy-lenol	($C_8H_{10}O$)	210.5	88	209.5
p-Chlor-phenol	(C_6H_5OCl)	219.75	28	212.5
o-Nitro-phenol	($C_6H_5O_3N$)	217.2	30	212.5

Dichlorethyl sulfide ($C_8H_8Cl_2S$) (b.t.=216.8) + Phenols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
m-5-Xy-lenol	($C_8H_{10}O$)	226.8	90	227.5
m-4-Xy-lenol	($C_8H_{10}O$)	210.5	25	218.5
p-Ethyl-phenol	($C_8H_{10}O$)	228.8	58	220.8
Guethol	($C_8H_{10}O_2$)	216.5	58	215.2
Mesitol	($C_9H_{12}O$)	220.5	72	223.0
o-Nitro-phenol	($C_6H_5O_3N$)	217.2	52	215.5

Methylterpenylether ($C_{11}H_{20}O$) (b.t.=216.2) + Phenols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
p-Ethyl-phenol	($C_8H_{10}O$)	218.8	14	216.2
p-Chlor-phenol	(C_6H_5OCl)	219.75	15	215.9
o-Nitro-phenol	($C_6H_5O_3N$)	217.2	28	215.9

Methylisobornyl ether ($C_{11}H_{20}O$) + o-Cresol
(C_7H_8O)

Lecat, 1949

% b.t.	
0	192.4
68	189.7 Az
100	191.1

Methylisobornyl ether ($C_{11}H_{20}O$) + o-Bromphenol
(C_6H_5OBr)

Lecat, 1949

% b.t.	
0	192.4
25	192.2 Az
100	195.0

Cineole ($C_{10}H_{18}O$) + Phenol (C_6H_6O)

Braucher

mol %		b.t.
L	V	
10 mm		
100	100	73.5
80	86.8	74.2
50	62.0	73.4
20	29.0	62.6
0	0	54.6

Lecat, 1949

%	b.t.
0	176.35
72	182.85
100	182.2

Bellucci and Grassi, 1913

%	f.t.	%	f.t.
100	42.5	38	+8
90	37.5	35	7.5
80	27	25	3
70	15	17	-14
60	-2	10	-7
55	-13	0	+1
50	-2		

Brambilla, 1942

%	f.t.	%	f.t.
0	0.9	50	-2.0
10	-6.8	55	-13.2
17	-13.9	60	-1.8
20	-5.0	70	+14.8
30	5.6	80	26.6
38	8.1	90	37.4
40	-8.2	100	42.4

Cineole ($C_{10}H_{18}O$) + o-Cresol (C_7H_8O)

Bellucci and Grassi, 1913

%	f.t.	%	f.t.
100	30	30	46
90	20	20	35
80	10	10	10
75	10	7.5	3
70	22	5	-3
60	40	2.5	-1.5
50	48	0	+1
40	50		(1+1)

Morgan, 1936

%	f.t.	%	f.t.
100	30	40	52
90	20	30	47
80	10	20	33
70	24	10	9
60	40	7	-2
50	50	0	+1
			(1+1)

Cineole ($C_{10}H_{18}O$) + m-Cresol (C_7H_8O)

Bellucci and Grassi, 1913

%	f.t.	%	f.t.
100	+4	40	-5
90	-1	30	-12
80	-6	25	-16
70	-12	20	-13
65	-17	10	-6
60	-14	0	+1
50	-6		(1+1)

Cineole ($C_{10}H_{18}O$) + p-Cresol (C_7H_8O)

Bellucci and Grassi, 1913

%	f.t.	%	f.t.
100	36	40	+1.5
90	30	35	0
80	17	30	-1.5
70	-2	25	-5.5
65	-14	20	-11
60	-13	10	-4
50	-1	0	+1
			(1+1)

Brambilla, 1942

%	f.t.	%	f.t.
0	0.9	60	-13.1
10	-3.8	70	-2.0
20	-11.2	80	17.4
30	-1.3	90	29.3
40	-1.8	100	36.1
50	-1.0		

Cineole ($C_{10}H_{18}O$) + o-Ethyl phenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f.t.	%	f.t.
100	-30	43	4.1
90	-	40	1.5
80	-	30	-8
70	-	25	-15
65	-25	20	-15
60	-14.5	10	-5
50	2	0	0.5 (1+1)

Cineole ($C_{10}H_{18}O$) + p-Ethyl phenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f.t.	%	f.t.
100	44	43.5	-4.5
90	36	40	-6.5
80	25.5	30	-13.5
70	7.5	20	-13.5
64	-4.1	10	-3.5
47	-9	0	+1 (1+1)

Cineole ($C_{10}H_{18}O$) + Thymol ($C_{10}H_{14}O$)

Bellucci and Grassi, 1913

%	f.t.	%	f.t.
100	50	50	+4.5
90	43	40	-1.5
80	35.5	30	-14
70	18.5	25	-16
65	7	20	-13
60	-2.5	10	-7
55	+3	0	+1 (1+1)

Cineole ($C_{10}H_{18}O$) + Hydroquinone ($C_6H_6O_2$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	170	-	35	117.5	103
90	165	95	30	103	-
80	161	95	26	106.5	-
70	156	103	20	101	-2
60	148.5	103	10	86	-2
50	140	103	5	71	-2
42	130	103	0	+1	-
40	127	103			
(1+1)					

Cineole ($C_{10}H_{18}O$) + Pyrocatechol ($C_6H_6O_2$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	104	-	42	39	31
90	99	31	40	38	0
80	94	31	30	30	-1
70	87	31	20	17	-2
60	76	31	10	4	-2
50	58	31	5	-2	-
47	44	31	0	+1	-
45	38	-			(1+1)

Cineole ($C_{10}H_{18}O$) + Resorcinol (C_6H_6O)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	110	-	35	88	-
90	104	74	30	85	-2
80	98	73	25	80	-
70	88	73	20	75	-2
65	80	73	15	70	-
60	73	-	10	64	-2
55	80	73	5	54	-
50	85	73	4	47	-
45	88	73	1	19	-
42	89	-	0	1	-
40	89	-			(1+1)

Brambilla, 1942

%	f.t.	%	f.t.
0	0.9	60	72.5
10	63.6	70	88.0
20	74.8	80	98.3
30	85.0	90	104.1
40	89.1	100	110.2
50	84.6		

Cineole ($C_{10}H_{18}O$) + o-4-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	63	50	11
90	59.5	40	-2.5
80	51	30	-15
70	40.9	20	-14
60	26.5	10	-6
56.5	13.5	0	+0.5 (1+1)

Cineole ($C_{10}H_{18}O$) + m-2-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	45	44.2	12.0
90	41	40	11
80	35.5	30	7
70	27	20	-1
60	15.0	10	-4.5
50	10	0	+0.5 (1+1)

Cineole ($C_{10}H_{18}O$) + m-4-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	20	40	23
90	13	30	11
80	28	20	-4
70	36	13	-15
62.5	37.9	10	-7.5
60	37.5	5	-2
50	33.5	0	+0.5 (1+2)

Morgan, 1936

%	f. t.	%	f. t.
100	20	40	24
90	15	30	8
80	31	20	-5
70	36	10	-2
60	38	0	+1
50	32		(1+2)

Cineole ($C_{10}H_{18}O$) + m-5-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	64.5	52.5	-2.5
90	60.0	40	-0.5
80	52	25	-12.5
70	40	20	-12.5
60	20	10	-3
50	-2	0	+0.5
45	0		(1+1)

Cineole ($C_{10}H_{18}O$) + p-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	72.5	43	26.8
90	70	40	25.5
80	65	30	17
70	57.5	20	2
60	46.5	10	-
50	25	0	0.5 (1+1)

Cineole ($C_{10}H_{18}O$) + 2-Methyl-4-ethyl phenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	6	50	-8.5
90	-1.5	40	-14.5
85	-8	35	-22
80	-12.5	30	-24
75	-2	20	-12.5
70	+2	10	-5.5
63.8	+4.1	0	+0.5
60	+2.2		(1+2)

Cineole ($C_{10}H_{18}O$) + 2-Methyl-6-ethyl phenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	-8	46.9	-23.1
90	-15.5	40	-27
80	-27.5	30	-28
70	-30	20	-18
60	-27	10	-7.5
50	-24	0	+0.5
			(1+2)

Cineole ($C_{10}H_{18}O$) + 3-Methyl-4-ethyl phenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	23.5	30	-21.5
95	19.5	20	-12.5
80	-2	10	-5
		0	+0.5

Cineole ($C_{10}H_{18}O$) + 3-Methyl-6-ethyl phenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	42	60	-1.5
90	38	30	-26
80	29.5	20	-13
75	25	10	-1.5
70	16.5	0	+0.5
65	10		

Cineole ($C_{10}H_{18}O$) + 4-Methyl-2-ethyl phenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	15	30	-24.5
88	0	20	-14
80	-6.5	10	-7.5
		0	+0.5

Cineole ($C_{10}H_{18}O$) + Guaiacol ($C_7H_8O_2$)

Bellucci and Grassi, 1913

%	f. t.	%	f. t.
100	30	40	4
90	25	35	1.5
80	19	30	0
70	12.5	25	-3
60	5	20	-3
55	3	10	-0.5
50	4.5	0	+1
45	5		

(1+2)

Cineole ($C_{10}H_{18}O$) + Methyl salicylate ($C_8H_8O_3$)

Bellucci and Grassi, 1913

%	f. t.	%	f. t.
100	+1	45	-16
90	-22	40	-17.5
85	-31	35	-14
80	-38.5	30	-10
75	-37.2	20	-4
70	-35	10	-1
60	-20	0	+1
50	-15		

(1+1)

Cineole ($C_{10}H_{18}O$) + Phenyl salicylate ($C_{13}H_{10}O_3$)

Bellucci and Grassi, 1913

%	f. t.	%	f. t.
100	42	40	-2.5
90	35	30	-12
80	28	20	-7
70	21.5	10	-3
60	14	0	+1
50	7		

Cineole ($C_{10}H_{18}O$) + α -Naphthol ($C_{10}H_8O$)

Bellucci and Grassi, 1913

%	f. t.	E	%	f. t.	E
100	93.5	-	48	75	-
90	88	58	40	72	-4
80	81.5	60	30	65	-6
70	72	60	20	45	-6
65	65	60	10	19.5	-6
60	68	60	5	-2	-6
50	74	60	0	+1	-

(1+1)

Cineole ($C_{10}H_{18}O$) + β -Naphthol ($C_{10}H_8O$)

Bellucci and Grassi, 1913

%	f. t.	E	%	f. t.	E
100	122	-	40	44	-2.5
90	114	42.5	30	37	-3.5
80	104	43.5	20	24	-3.5
70	93.5	43.5	15	13.5	-
60	74.5	43.5	10	-1.5	-3.5
55	58.5	-	5	-2	-3.5
50	47	43.5	0	+1	-
48	48	-			

(1+1)

Cineole ($C_{10}H_{18}O$) + Naphthyl salicylate
($C_{17}H_{12}O_3$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	90	-	40	49	-5
90	83	-5	30	37.5	-5
80	76.5	-5	20	24	-5
70	70	-5	10	-2	-
60	64	-5	5	-1	-
50	57	-5	0	+1	-

Cineole ($C_{10}H_{18}O$) + o-Aminophenol (C_6H_7ON)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	170	-	20	140	0
70	164	0	10	117	0
60	162	0	5	90	-
50	159	0	2.5	29	0
40	155	-	0	1	-
30	150	-			

Cineole ($C_{10}H_{18}O$) + m-Aminophenol (C_6H_7ON)

Bellucci and Grassi, 1923

%	f.t.	E	%	f.t.	E
100	123	-	30	101	-3
90	117.5	-3	20	90	-3
70	114	-3	10	64	-3
60	111.5	-	5	3	-3
50	109	-3	2.5	-1	-
40	105	-	0	+1	-

Cineole ($C_{10}H_{18}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	44	-	30	16	-6
90	40	-6	20	4	-6
80	36	-6	15	-2	-6
70	33	-6	10	-4.5	-6
60	30	-6	5	-1.5	-6
50	26.5	-6	0	+1	-
40	22	-6			

Brambilla, 1942

%	f.t.	%	f.t.
0	+0.9	60	29.8
10	-4.4	70	33.0
20	+4.1	80	36.3
30	15.9	90	40.2
40	22.0	100	43.8
50	26.5		

Cineole ($C_{10}H_{18}O$) + m-Nitrophenol ($C_6H_5O_3N$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	96	-	40	16	-15
90	91	-15	30	-2	-15
80	85	-15	25	-12	-
70	75	-	20	-12	-
60	55	-	10	-4	-15
50	35	-15	0	+1	-

Cineole ($C_{10}H_{18}O$) + p-Nitrophenol ($C_6H_5O_3N$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	114	-	40	26	-16
90	107	-16	30	1	-16
80	99	-16	25	-11	-
70	89	-	20	-12	-
60	73	-	10	-5	-16
55	61	-16	0	+1	-
50	49	-16			

Cineole ($C_{10}H_{18}O$) + Dinitro-o-cresol
($C_7H_6O_5N_2$)

Brambilla, 1942

%	f.t.	%	f.t.
0	+0.9	60	47.2
10	-6.8	70	58.1
20	-11.1	80	70.8
30	-12.3	90	79.9
40	+14.0	100	86.0
50	32.3		

Butylphenyl ether ($C_{10}H_{14}O$) + Resorcinol
($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	286.5
83	275.0 Az
100	281.4

Butylphenyl ether ($C_{10}H_{14}O$) + Pyrogallol
($C_6H_6O_3$)

Lecat, 1949

%	b.t.
0	286.5
20	283.5 Az
100	309

Anethole ($C_{10}H_{12}O$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	235.7
25	233.0 Az
100	245.9

Ethylbenzyl ether ($C_9H_{12}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b.t.
0	185.0
93	181.9 Az
100	182.2

Methyleugenol ether ($C_{11}H_{14}O_2$) + Eugenol
($C_{10}H_{12}O_2$)

Lecat, 1949

%	b.t.	Ot mix.
0	254.7	-
45	254.9	10.6 Az
100	254.8	-

Methylthymol ether ($C_{11}H_{16}O$) + Ethylphenol-p
($C_8H_{10}O$)

Lecat, 1949

%	b.t.
0	216.5
20	216.3 Az
100	213.8

Veratrole ($C_8H_{10}O_2$) + Phenol (C_6H_6O)

Paterno, 1895

%	f.t.	%	f.t.
0	22.53	17.17	7.71
1.72	21.19	21.26	2.47
3.59	19.89	24.04	-0.11
10.87	14.22		
14.48	10.89		

%	f.t.	%	f.t.
69.94	-28.89	85.39	-9.92
72.68	-25.49	87.58	-8.12
75.13	-22.99	90.62	-5.66
78.22	-17.29	93.95	-3.39
81.77	-13.63	93.15	-0.62

Veratrole ($C_8H_{10}O_2$) + Thymol ($C_{10}H_{14}O$)

Paterno, 1895

%	f.t.	%	f.t.
0	22.53	4.62	20.53
0.54	22.23	11.94	16.92
1.11	22.05	17.99	13.43
2.40	21.45	23.81	5.33

Diethylresorcinol ether ($C_{10}H_{14}O_2$) + Pyrocatechol
($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	235.4
29	233.5 Az
100	245.9

Hydroquinone dimethyl ether ($C_8H_{10}O_2$)
+ Picric acid ($C_6H_3O_7N_3$)

Giua and Marcellino, 1920

%	f.t.	E	%	f.t.	E
0	54.4	-	50.02	40.8	41.4
9.59	52.6	-	50.05	40.7	36.6
14.27	50.5	-	52.15	41.3	41.4
23.21	47.2	-	55.12	47.1	41.4
26.68	45.7	37.0	60.88	60.2	41.0
33.58	42.5	37.2	65.91	70.0	36.6
37.42	40.4	37.1	69.54	75.0	"
42.11	37.4	37.2	73.30	81.5	"
45.39	38.1	37.0	76.19	85.2	"
49.98	39.5	36.8	100.00	122.0	"

(3+2)

Phenylether ($C_{12}H_{10}O$) (b.t.=259.0) + Phenols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	sat.t.
Pyro- catechol	$C_6H_6O_2$	245.9	59.3	242.0	92
Resor- cinol	$C_6H_6O_2$	281.4	23	255.65	93
Eugenol	$C_{10}H_{12}O_2$	254.8	37	254.7	-

β -Naphthyl methyl ether ($C_{11}H_{10}O$) + Picric acid
($C_6H_3O_7N_3$)

Giua and Marcellino, 1920

%	f.t.	E	%	f.t.	E
0	70.9	-	55.40	113.0	90
8.35	68.2	67.4	59.16	113.3	"
20.25	80.2	"	61.13	113.3	"
24.38	87.2	"	63.39	112.8	"
33.15	98.0	"	66.41	111.5	"
33.30	98.0	"	68.68	110.3	"
38.97	102.5	"	77.17	105.3	"
45.9	108.0	"	84.86	102.0	"
48.62	110.3	90	100	122.0	"
51.23	112.0	"			

(1+1)

o-Chloranisole (C_7H_7OCl) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b.t.
0	195.7
80	189.8 Az
100	191.1

p-Bromphenetole (C_8H_9OBr) + Pyrocatechol
($C_6H_6O_2$)

Lecat, 1949

%	b.t.
0	234.2
20	231.5 Az
100	245.9

p-Bromphenetole (C_8H_9OBr) + o-Xylenol asym.
($C_8H_{10}O$)

Lecat, 1949

%	b.t.
0	234.2
88	228.0 Az
100	226.8

Safrole ($C_{10}H_{10}O_2$) + Phenol (C_6H_6O)

Brauer, 1929

%	mol%	b. t. / 10mm
100	100	72.0
80	87.3	73.7
50	65.6	77.4
0	0	105.2

Safrole ($C_{10}H_{10}O_2$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.	Sat. t.
0	235.9	-
23	233.55	71 Az
100	245.9	-

Safrole ($C_{10}H_{10}O_2$) + Ethylsalicylate ($C_9H_{10}O_3$)

Lecat, 1949

%	b. t.	Dt mix.
0	235.9	-
50	-	-0.3
82	233.78	-
100	233.8	-

Isosafrole ($C_{10}H_{10}O_2$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	252.0
70	242.7 Az
100	245.9

Isosafrole ($C_{10}H_{10}O_2$) + Eugenol ($C_{10}H_{12}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	252.0	-
8	251.95	-
80	-	0
100	254.8	-

Dimethylpyrone ($C_7H_8O_2$) + o-Cresol (C_7H_8O)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.4	49.4
10.5	126.5	66.6	50.4
20	119.5	70.5	49.2
30.5	105.5	76.0	43.2
38.6	91.1	79.4	37.0
44.8	74.3	82.8	27.5
47.6	64.0	84.8	21.8
50.8	54.3 (1+1)	86.1	16.6
53.4	53.5	86.1	16.6
56.9	51.5	89.0	21.0
60.4	47.2	94.5	26.9
60.4	47.2 (1+2)	100	30.3

Dimethylpyrone ($C_7H_8O_2$) + m-Cresol (C_7H_8O)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	58.4	21.3 (1+2)
15	123.0	61.8	23.9
25.6	112.0	65.3	25.0
35.2	97.2	68.0	25.3
41.3	84.2	71.6	23.7
46.4	69.8	77.0	17.4
50	55.6	81.0	9.5
54.1	35.3	85.7	5.0
56.1	24.7	90.5	-1.2
59.0	4.3	95.2	6.1
		100	10.9

Dimethylpyrone ($C_7H_8O_2$) + p-Cresol (C_7H_8O)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.0	19.6
11.4	125.5	64.2	19.6 (1+2)
22.8	115.0	66.8	20.3
32.4	102.0	68.4	19.7
38.6	90.2	70.8	17.5
45.1	73.6	74.1	11.2
49.0	59.6	76.7	1.2
51.8	46.6	82.9	-0.5
55.1	31.8	86.7	14.6
58.5	25.7 (1+1)	92.9	26.6
61.3	22.4	100	34.1

Phenyltetramethyltetrahydropyrane ($C_{15}H_{22}O$)
+ Pyrocatechol ($C_6H_6O_2$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	104.7	103.9	41.8	76.7	51.5
78.7	94.6	74.7	33.5	73.2	50.9
61.4	82.6	75.3	19.6	63.1	51.1
56.7	78.2	75.2	11.5	53.9	50.9
52.4	77.6	74.4	6.3	54.8	50.7
48.6	77.9	65.8	0	57.5	56.2
(1+1)					

Phenyltetramethyltetrahydropyrane ($C_{15}H_{22}O$)
+ α -Naphthol ($C_{10}H_8O$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	96.2	95.1	47.1	68.4	48.6
87.9	90.2	62.1	39.4	65.8	48.0
74.7	78.8	61.6	27.8	58.8	48.3
65.0	67.0	61.8	19.9	50.9	48.1
59.6	65.9	61.3	9.9	53.8	48.3
54.2	68.0	61.4	0	57.5	56.2
(1+1)					

Phenyltetramethyltetrahydropyrane ($C_{15}H_{22}O$)
+ β -Naphthol ($C_{10}H_8O$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	120.8	119.5	35.9	42.7	35.2
81.0	108.4	36.9	20.5	48.4	37.4
58.8	85.3	37.1	8.2	54.2	37.6
50.8	74.5	37.3	0	57.6	56.2

Phenyltetramethyltetrahydropyrane ($C_{15}H_{22}O$) +
Resorcinol ($C_6H_6O_2$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	110.1	109.0	27.9	66.3	52.7
76.5	96.5	60.4	21.3	64.6	52.1
62.0	83.9	58.4	15.3	60.2	52.7
51.5	69.2	59.5	11.5	54.3	51.9
45.3	63.2	59.3	7.0	55.1	51.6
39.7	65.8	60.4	0	57.5	56.2
32.1	67.1	63.1			
(2+1)					

(Tetramethyl) bitolyl cyclic oxide ($C_{18}H_{20}O$) +
Pyrocatechol ($C_6H_6O_2$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	104.7	103.9	41.9	77.1	73.6
74.9	94.4	73.9	26.3	79.8	74.2
58.2	86.8	74.0	14.5	85.5	73.9
48.4	80.8	73.8	0	91.8	90.0

(Tetramethyl) bitolyl cyclic oxide ($C_{18}H_{20}O$) +
 α -Naphthol ($C_{10}H_8O$)

Bennett and Wain, 1936

mol%	f.t.	E	mol%	f.t.	E
100	96.2	95.1	34.3	75.7	70.2
84.3	88.1	65.2	33.0	76.2	73.6
71.0	79.0	65.4	28.8	76.4	72.5
63.2	71.4	65.7	24.1	79.4	72.8
52.3	70.5	64.8	18.0	82.6	72.7
42.9	74.1	64.6	0	91.8	90.0

(2+1) 76° (incongruent)

Ethyl ether ($C_4H_{10}O$) + Formic acid (CH_2O_2)

Udovenko and Airapetova, 1947

mol%	d	η	κ
0°			
100.00	1.2375	2821.0	0.739
98.30	-	-	0.596
95.57	-	-	0.497
92.03	1.0467	2211.0	0.387
82.51	1.0618	1641.3	0.175
72.75	0.9949	1219.2	0.092
63.81	0.9445	938.3	0.043
52.65	0.8933	703.6	0.029
35.78	0.8297	496.2	0.009
23.95	0.7922	401.3	0.001
21.67	0.7897	394.9	0.001
13.98	0.7744	359.4	-
0.00	0.7323	296.8	-
25°			
100.00	1.2088	1537.2	1.245
98.30	-	-	0.991
95.57	-	-	0.835
92.03	1.1193	1303.8	0.639
82.51	1.0334	1025.1	0.283
72.75	0.9684	808.9	0.143
63.81	0.9182	653.1	0.068
52.65	0.8682	509.9	0.044
35.78	0.8036	377.6	0.015
23.95	0.7674	318.0	0.001
21.67	0.7618	310.7	0.001
13.98	0.7478	292.8	-
0.00	0.7048	246.1	-

Ether ($C_4H_{10}O$) + Acetic acid ($C_2H_4O_2$)

Pickering, 1893.

%	f.t.	%	f.t.
100	+16.626	49.005	-16.57
98.926	+16.06	46.726	18.23
97.939	15.57	40.940	19.75
96.772	14.96	40.947	22.35
95.775	14.47	40.987	22.67
94.546	13.80	39.049	24.87
92.469	12.83	36.175	28.67
80.756	11.35	33.951	31.27
86.754	9.71	30.384	33.87
83.484	8.21	28.205	37.97
81.251	6.61	24.550	43.27
78.649	5.06	22.762	45.47
76.209	3.58	20.536	49.97
73.545	+1.90	18.647	55.27
71.063	-0.32	17.102	58.47
68.742	-1.25	14.775	62.97
66.269	2.02	14.445	63.47
64.247	3.48	13.807	-66.47
61.562	6.55		
58.799	8.37		
55.811	10.88		
53.774	12.48		
51.279	-14.30		

Tock, 1930

mol%	f.t.	E	tr.t.
100	16.5	-	-
72.28	-3.0	-120	-
73.73	-4.0	"	-126
49.55	-28.0	"	"
26.27	-57.0	"	-125
17.62	-77.0	"	-126
6.82	-116	"	"
3.74	-	"	"
0	-	"	-

Smyth and Rogers, 1930

mol%	d			
	0°	10°	20°	30°
0	0.7370	0.7254	0.7137	0.7021
3.39	.7364	.7276	.7189	.7102
6.73	.7532	.7414	.7295	.7176
10.39	.7619	.7504	.7387	.7271
12.69	.7669	.7556	.7442	.7328
35.49	.8259	.8146	.8032	.7918
52.33	.8731	.8628	.8526	.8424
71.98	.9450	.9342	.9234	.9126
100.00	-	1.0607	1.0491	1.0376

Pucarieff, 1932							
%	0°	10°	18°	20°	30°	40°	50°
0	-	-	263.1	-	-	-	-
12.4	360.8	339.5	-	318.4	283.7	-	-
15.5	-	-	366.5	-	-	-	-
25.75	427.1	403.2	-	373.7	335.4	308.8	-
40.26	-	-	-	409.6	-	-	-
53.14	-	-	-	516.1	-	-	-
56.49	654.0	599.0	549.8	545.1	483.0	-	393.7
63.93	812.9	744.7	-	664.1	595.3	521.5	466.5
71.06	-	-	726.8	-	-	-	-
74.9	1142.3	996.9	-	-	737.6	662.1	587.7
76.74	-	-	821.3	-	-	-	-
79.47	-	-	811.2	-	-	-	-
83.75	-	-	937.0	-	-	-	-
83.93	-	-	-	-	-	-	-
88.12	-	-	1147.4	-	-	-	-
91.1	1409.0	1198.8	1054.8	1047.6	899.9	791.0	683.5
93.29	-	-	1202.2	-	-	-	-
93.32	-	-	1196.0	-	-	-	-
100.00	-	1654.7	1345.0	1296.0	1099.6	960.1	828.8

Rogers and Smith, 1930.							
mol%	0°	10°	20°	30°	ϵ		
0	4.746	4.499	4.296	4.113			
3.39	.817	.608	.402	.197			
6.73	.869	.671	.462	.276			
10.39	.966	.749	.542	.348			
12.69	5.015	.797	.593	.406			
35.49	.489	5.275	5.072	.880			
52.33	.793	.606	.428	5.268			
71.98	6.28	6.12	.97	.81			
100.00	-	.07	6.13	6.20			

Ether (C ₄ H ₁₀ L) + Propionic acid (C ₃ H ₆ O ₂)							
Schmidt, 1891							
%	C.V.T.						
100	337.6						
24.74	231.9						
0	193.8						

Ether (C ₄ H ₁₀ O) + Butyric acid (C ₄ H ₈ O ₂)							
Konovalov, 1907							
%	p	%	p	18.1°			
0	413.7	66.91	143.6				
19.81	341.5	69.36	132.9				
30.50	301.0	80.50	83.3				
49.65	222.3						

Ether (C ₄ H ₁₀ O) + Isobutyric acid (C ₄ H ₈ O ₂)							
Konovalov, 1907							
%	p	%	p	18.1°			
0	413.6	50.71	216.4				
21.49	334.9	66.70	146.4				
33.30	300.1	73.89	114.4				

Ether (C ₄ H ₁₀ O) + 1-Methylcaproic acid (C ₇ H ₁₄ O ₂)							
Rule, Smith and Harrower, 1933							
mol%	(α) $_{5461}^{mol}$	mol%	(α) $_{5461}^{mol}$	20°			
2.3	33.3	14.7	34.96				
5.3	34.3	20.7	34.70				
7.2	34.7	33.4	33.56				
9.4	35.1	100.0	32.15				

Ether (C ₄ H ₁₀ O) + Oleic acid (C ₁₈ H ₃₄ O ₂)							
Dornte, 1929							
%	p	%	p	30°			
95.04	96.7	62.60	414.8				
92.82	119.9	38.07	535.6				
85.64	217.9	0	642.1				
76.45	303.2						

Hoerr and Harwood, 1952

%	f.t.	%	f.t.
1.2	-40	37.5	-10
4.1	-30	66.1	0
15.0	-20	89.7	+10

Campbell, 1915

%	d	%	d
30°			
100	0.8859	59.09	0.8118
90.48	.8690	46.71	.7896
75.45	.8429	0	.7010

Ether ($C_4H_{10}O$) + Malonic acid ($C_3H_4O_4$)

Klobbie, 1897

%	f.t.	%	f.t.
6.255	0	10.49	30
7.49	10	35.20	83
7.79	14	54.75	106
8.19	15	80.15	123
9.25	21	100	132

Ether ($C_4H_{10}O$) + Monochloroacetic acid ($C_2H_3O_2Cl$)

Konovalov, 1907

mol%	p	mol%	p
18.1°			
0	413.6	37.69	229.4
15.20	351.0	49.39	155.7
24.34	306.9	58.65	104.0

Weissenberger, Schuster and Pamer, 1925

mol%	p	mol%	p
20°			
0	442.4	30	228.1
10	381.0	40	176.4
20	299.0	50	131.2

Ether ($C_4H_{10}O$) + Dichloroacetic acid ($C_2H_2O_2Cl_2$)

Konovalov, 1907

mol%	p	mol%	p
18.1°			
0	413.6	39.81	152.6
15.0	343.1	44.54	95.6
31.89	217.8	66.56	13.0
Q mix.			
79.94		752	
66.49		1107	
50.27		1361	
33.60		1129	
20.72		793	

Weissenberger, Schuster and Pamer, 1925

mol%	p	Q mix	mol%	p	Q mix
20°					
0	442.4	-	40	116.7	1419
10	365.0	355	50	51.3	1350
20	-	710	60	-	1100
30	202.4	1065	70	6.7	785

Ether ($C_4H_{10}O$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Konovalov, 1907

mol%	p
18.1°	
0	413.6
23.35	276.8
34.20	203.9
41.70	126.5
49.13	47.4

Tsakalotos, 1910

%	d	%	d
18°			
0	0.7165	44.76	0.8930
17.63	.8115	62.63	1.159
31.78	.8990	74.60	1.314

Weissenberger, Schuster and Pamer, 1925

mol%	P
20°	
0	442.4
10	266.0
30	202.8
40	116.0
50	31.7

Ether ($C_6H_{10}O$) + Benzoic acid ($C_7H_6O_2$)

Beckmann, 1890

%	b.t.	%	b.t.
0	34.97	6.42	36.092
1.24	35.192	11.91	37.019
3.32	35.561	18.10	38.112

Gilbault, 1897

%	T.C.V.	P.C.V.
0	189.9	36.8
5.0957	221.9	57.0
22.691	261	71.8

Carroll, Rollefson and Mathews, 1925

%	f.t.
18.9	0
29.0	25

Tammann and Hirschberg, 1894

%	v^t/v^0		
	10°	20°	30°
0	1.01532	1.03147	1.04851
20.28	.01335	.02795	.04236
100	.01427	.02960	.04550

Timofeev, 1905

%	U
20°	
0	0.539
22.8	0.552

%	Q mix (by mole acid)	
initial	final	
0	1.54	-2.33
1.54	4.5	-2.38
4.5	7.3	-2.46
7.3	9.9	-2.57

Ether ($C_6H_{10}O$) + Salicylic acid ($C_7H_6O_3$)

Tammann and Hirschberg, 1894

%	v^t/v^0		
	10°	20°	30°
0	1.01532	1.03147	1.04851
33.19	1.01257	1.02577	1.03962

Ether ($C_6H_{10}O$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Collett and Lazzell, 1930

mol%	f.t.	mol%	f.t.
100.00	147.7	50.81	104.1
82.90	135.2	22.81	55.8
68.17	123.5	12.25	32.7
53.52	107.9		

Ether ($C_6H_{10}O$) + m-Nitrobenzoic acid ($C_7H_5O_4N$)

Collett and Lazzell, 1930

mol%	f.t.	mol%	f.t.
100.00	142.4	41.80	89.6
86.36	133.0	35.96	81.9
71.98	122.2	29.80	71.9
61.51	113.0	21.33	52.0
48.82	98.4		

Ether (C ₄ H ₁₀ O) + p-Nitrobenzoic acid (C ₇ H ₅ O ₄ N)					
Collett and Lazzell, 1930					
mol%		f.t.			
100.00		239.9			
25.46		193.6			
5.37		187.6			
Lecat, 1949					
Butyl ether (C ₈ H ₁₈ O) (b.t.=142.4) + Acids.					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Propionic acid	(C ₃ H ₆ O ₂)	141.3	45	136.0	-1.0 (50%)
Isobutyric acid	(C ₄ H ₈ O ₂)	154.6	22	140.5	-0.3 (15%)
Pyruvic acid	(C ₃ H ₄ O ₃)	166.8	15	138.0	-
Isobutyl ether (C ₈ H ₁₈ O) + Acetic acid (C ₂ H ₄ O ₂)					
Lecat, 1949					
%		b.t.			
0		122.3			
43		113.5 Az			
100		118.1			
Isobutyl ether (C ₈ H ₁₈ O) + Propionic acid (C ₃ H ₆ O ₂)					
Lecat, 1949					
%		b.t.		Dt mix.	
0		122.3		-	
6		121.5		-	
10		-		-0.3	
100		141.3		-	

Amyl ether (C ₁₀ H ₂₂ O) (b.t.=187.5) + Acids.					
Lecat, 1949					
2 nd comp.		b.t.	%	b.t.	Dt mix
Valeric Acid	(C ₅ H ₁₀ O ₂)	186.35	45	181.5	-0.4 (50%)
Isovaleric Acid	(C ₅ H ₁₀ O ₂)	176.5	70	175.0	-0.3 (70%)
Chlor-acetic acid	(C ₂ H ₃ O ₂ Cl)	289.35	50	184.3	-
Isoamyl ether (C ₁₀ H ₂₂ O) (b.t.=173.2) + Acids					
Lecat, 1949					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt.mix.
Butyric acid	(C ₄ H ₈ O ₂)	164.0	50	-	-0.4
			54	161.8	-
Isobutyric acid	(C ₄ H ₈ O ₂)	154.6	80	-	-0.2
			93	154.2	-
Valeric acid	(C ₅ H ₁₀ O ₂)	186.35	10	-	-0.2
			12.5	171.8	-
Isovaleric acid	(C ₅ H ₁₀ O ₂)	176.5	35	169.0	-0.3
Chloracetic acid	(C ₂ H ₃ O ₂ Cl)	189.38	16	171.95	-
Monochloracetal (C ₆ H ₁₃ O ₂ Cl) + Isobutyric acid (C ₄ H ₈ O ₂)					
Lecat, 1949					
%		b.t.			
0		157.4			
82		154.3 Az			
100		154.6			

Ethyl sulfide ($C_4H_{10}S$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	92.1
35	82.2 Az
100	100.75

Ethyl sulfide ($C_4H_{10}S$) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	92.1
10	91.5 Az
100	118.1

Lecat, 1949

Propyl sulfide ($C_6H_{14}S$) (b.t.=141.5) + Acids.

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Formic acid	(CH_2O_2)	100.75	83	98.0
Acetic acid	($C_2H_4O_2$)	118.1	83	116.9
Propionic acid	($C_3H_6O_2$)	141.3	45	136.5

Isopropyl sulfide ($C_6H_{14}S$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	120.5
62	93.5 Az
100	100.75

Isopropyl sulfide ($C_6H_{14}S$) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	120.5
48	111.5 Az
100	118.1

Butyl sulfide ($C_8H_{18}S$) + Isovaleric acid
($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.
0	185.0
73	175.0 Az
100	176.5

Isobutyl sulfide ($C_8H_{18}S$) + Butyric acid
($C_4H_8O_2$)

Lecat, 1949

%	b.t.
0	172.0
78	162.5 Az
100	164.0

Isoamyl sulfide ($C_{10}H_{22}S$) + Caproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b.t.
0	214.8
95	204.5 Az
100	205.15

Allyl sulfide ($C_6H_{10}S$) (b.t.=139.35) + Acids.

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Formic acid	(CH_2O_2)	100.75	80	97.5
Acetic acid	($C_2H_4O_2$)	118.1	78.5	116.55
Propionic acid	($C_3H_6O_2$)	141.3	40	134.6

Methylterpenyl ether ($C_{11}H_{20}O$) + Heptanoic acid
($C_7H_{14}O_2$)

Lecat, 1949

%	b.t.
0	216.2
30	215.3 Az
100	222.0

Ethylisobornyl ether ($C_{12}H_{22}O$) + Heptanoic acid
($C_7H_{14}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	203.8	-
30	-	-0.5
45	201.5	-
100	205.15	-

Cineole ($C_{10}H_{18}O$) + Valeric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	176.35	-
3	176.3 Az	-
10	-	+1.0
100	186.35	-

Cineole ($C_{10}H_{18}O$) + Isovaleric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	176.35	-
42.5	175.0 Az	-
50	-	+2.6
100	176.5	-

Cineole ($C_{10}H_{18}O$) + o-Oxybenzoic acid ($C_7H_6O_3$)

Bellucci and Grassi,

%	f.t.	E	%	f.t.	E
100	157	-	40	91	-11
90	150	-11	30	40	-11
80	144	-11	25	12	-
70	137	-11	20	-11	-
60	129	-11	10	-4	-11
50	115	-11	0	+1	-

Cineole ($C_{10}H_{18}O$) + m-Oxybenzoic acid ($C_7H_6O_3$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	200	-	35	124	-
80	186.5	-13	30	82	-13
70	180	-13	25	36	-
60	171	-13	20	-13	-
50	160	-13	10	-5	-13
40	142	-13	0	+10	-

Cineole ($C_{10}H_{18}O$) + p-Oxybenzoic acid ($C_7H_6O_3$)

Bellucci and Grassi, 1913

%	f.t.	E	%	f.t.	E
100	214	-	25	111	60
60	190	51	20	61	-8
50	179	50	15	53	-8
45	171	52	10	42	-8
40	164	-	5	19	-8
30	135	59	0 ₍₁₊₄₎	1	-

Anisole (C_7H_8O) (b.t.=153.85) + Acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Propionic acid	($C_3H_6O_2$)	141.3	87	141.17	-0.7 (40%)
Butyric acid	($C_4H_8O_2$)	164.0	12	152.85	-0.1 (11%)
Isobutyric acid	($C_4H_8O_2$)	154.6	42	149.0	-1.8 (50%)
Pyruvic acid	($C_3H_4O_3$)	166.8	28	148.5	-

Phenetole ($C_8H_{10}O$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f.t.
98.97	-0.324
94.71	1.602
91.52	2.522
85.53	4.162
81.33	5.252

Phenetole ($C_8H_{10}O$) + Butyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	170.45	-
50	-	-0.1
65	162.35 Az	-
100	164.0	-

Phenetole ($C_8H_{10}O$) + Isovaleric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	170.45	-
20	-	-0.3
23	168.5 Az	-
200	176.5	-

Phenetole ($C_8H_{10}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Eykmán, 1889

%	f.t.	%	f.t.
0	5.30	8.275	2.95
1.293	0.465	14.14	4.965
2.396	1.04	19.22	6.69
4.82	1.73	23.88	8.19

Propylphenyl ether ($C_9H_{12}O$) + Valeric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.
0	190.5
58	184.3 Az
100	186.35

Propylphenyl ether ($C_9H_{12}O$) + Isocaproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b.t.
0	190.5
10	190.0 Az
100	199.5

Anethole ($C_{10}H_{12}O$) + Lauric acid ($C_{12}H_{24}O_2$)

Eykmán, 1889

%	f.t.	%	f.t.
100	43.4	86.46	39.26
95.21	42.25	81.76	37.90
91.48	40.79	77.9	36.76

Anethole ($C_{10}H_{12}O$) (b.t.=235.7) + Acids.

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Caprylic acid	(C ₈ H ₁₆ O ₂)	238.5	35	234.0
Benzoic acid	(C ₇ H ₆ O ₂)	250.4	12	234.6
Levulinic acid	(C ₅ H ₈ O ₃)	252	22	232.0

Methyl-p-cresyl ether ($C_8H_{10}O$) + Valeric acid
($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.
0	177.05
22	176.0 Az
100	176.35

Methyl-p-cresyl ether ($C_8H_{10}O$) + Isovaleric acid
($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.
0	177.05
45	172.0 Az
100	176.5

Methylbenzyl ether ($C_8H_{10}O$) + Butyric acid
($C_4H_8O_2$)

Lecat, 1949

%	b.t.
0	167.8
55	160.0 Az
100	164.0

Methylbenzyl ether ($C_8H_{10}O$) + Isovaleric acid
($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	167.8	-
22	167.0 Az	-
25	-	-0.3
100	176.5	-

Ethylbenzyl ether ($C_9H_{12}O$) + Valeric acid
($C_5H_{10}O_2$)

Lecat, 1949

%	b.t.
0	185.0
40	180.5 Az
100	186.35

Methylthymol ether ($C_{11}H_{16}O$) + Caprylic acid
($C_8H_{16}O_2$)

Lecat, 1949

%	b.t.
0	216.5
15	215.0 Az
100	222.0

Methyleugenyl ether ($C_{10}H_{12}O_2$) + Benzoic acid
($C_7H_6O_2$)

Lecat, 1949

%	b.t.	Sat.t.
0	254.7	-
89	250.6	117 Az
100	250.8	-

Methylisoeugenyl ether ($C_{10}H_{12}O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Lecat, 1949

%	b.t.	Sat.t.
0	270.5	-
60	265.4	48.5 Az
100	266.5	-

Veratrole ($C_8H_{10}O_2$) + Acetic acid ($C_2H_4O_2$)

Paterno, 1895

%	f.t.	%	f.t.
0.	22.53	5.31	18.25
0.35	22.22	7.64	16.63
0.93	21.69	10.43	14.88
1.96	20.81	16.31	11.43
3.26	19.80		

Veratrole ($C_8H_{10}O_2$) + Valeric acid ($C_5H_{10}O_2$)

Paterno, 1895

%	f.t.	%	f.t.
0	22.53	5.75	19.52
0.50	22.23	9.03	17.94
1.00	21.90	16.13	15.09
1.76	21.42	29.05	10.08
3.63	20.58		

Veratrole ($C_8H_{10}O_2$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f.t.	E	mol%	f.t.	E
100	56.5	-	50	28	-
90	49.5	-	40	23	-
80	37	8	30	12	3
70	19	12.5	20	10.5	3.5
65	18	12	10	17	-
60	23	-	0	22	-
(1+1)					

Safrole ($C_{10}H_{10}O_2$) (b.t.=235.9) + Acids.
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Heptanoic acid	($C_7H_{14}O_2$)	222.0	85	221.7	-
Caprylic acid	($C_8H_{16}O_2$)	238.5	42	232.5	-
Benzoic acid	($C_7H_6O_2$)	250.8	12.5	234.75	47
Levulinic acid	($C_5H_8O_3$)	252	17	232.5	-

Isosafrole ($C_{10}H_{10}O_2$) (b.t.=252.0) + Acids.
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Pelargonic acid	($C_9H_{18}O_2$)	254.0	35	249.5	-
Benzoic acid	($C_7H_6O_2$)	250.8	53.5	246.5	89
Phenyl-acetic acid	($C_8H_8O_2$)	266.5	13	250.8	-

Diphenyl ether ($C_{12}H_{10}O$) (b.t.=259.0) + Acids.
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Pelargonic acid	($C_9H_{18}O_2$)	254.0	55	250.5	-
Caprinic acid	($C_{10}H_{20}O_2$)	268.8	12	258.0	-
Benzoic acid	($C_7H_6O_2$)	250.8	59	247.3	99
Phenyl-acetic acid	($C_8H_8O_2$)	266.5	27.8	255.05	306

Phenylbenzyl ether ($C_{13}H_{12}O$) + Phenylacetic acid
($C_8H_8O_2$)

Lecat, 1949

%	b.t.
0	286.5
90	266.0 Az
100	266.5

Dioxane ($C_4H_8O_2$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	101.35	-
43	113.35 Az	-
50		+8.0
100	100.75	-

Dioxane ($C_4H_8O_2$) + Acetic acid ($C_2H_4O_2$)			Allard and Wenzke, 1934	
Lecat, 1949			mol%	molar refraction of acetic acid
%	b. t.	Dt mix.	0.000	12.93
0	101.35	-	2.992	13.00
9	-	-	4.997	12.91
77	119.5 Az	+0.7	10.101	12.98
100	118.1	-	10.885	12.934
			20.932	12.921
			31.192	12.913
			50.695	12.951
			60.660	12.952
			70.266	12.968
			84.221	12.991
			89.763	12.991
			94.271	12.999
			96.622	12.996
			98.207	12.997
			100.000	12.997
Osipov and Shelomov, 1956			Osipov and Shelomov, 1956.	
mol%	d	mol%	d	
100.00	1.0510	40.00	1.0429	
80.00	.0501	20.00	.0379	
60.00	.0474	10.00	.0339	
50.00	.0450			
Kovalenko, Trifonov and Tissen, 1956.			Dioxane ($C_4H_8O_2$) + Caprinic acid ($C_{10}H_{20}O_2$)	
mol%	25°	d	40°	
0	1.0265		1.0101	
20	1.0348		1.0185	
40	1.0411		1.0245	
60	1.0434		1.0268	
80	1.0442		1.0285	
100	1.0453		1.0295	
mol%	25°	η	40°	
2	1181		919	
20	1187		920	
40	1285		981	
60	1333		1013	
80	1332		1012	
100	1193		921	
mol%	25°	σ	40°	
2	33.65		31.53	
20	33.01		31.30	
40	32.52		30.75	
60	31.70		30.00	
80	29.34		27.64	
100	27.57		26.07	
mol%	25°	n_D	40°	
0	1.4204		1.4126	
20	1.4145		1.4072	
40	1.4068		1.4000	
60	1.3973		1.3908	
80	1.3853		1.3790	
100	1.3710		1.3662	
Hoerr, Sedgwick and Ralston, 1946			Dioxane ($C_4H_8O_2$) + Lauric acid ($C_{12}H_{24}O_2$)	
%	f. t.		Hoerr, Sedgwick and Ralston, 1946	
78.1	20.0		%	f. t.
97.8	30.0		50.2	20.0
			71.1	30.0
			92.7	40.0

Dioxane ($C_4H_8O_2$) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f.t.
24.5	20.0
46.8	30.0
69.5	40.0
91.6	50.0

Dioxane ($C_4H_8O_2$) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f.t.
9.8	20.0
24.7	30.0
47.6	40.0
71.3	50.0
94.5	60.0

Dioxane ($C_4H_8O_2$) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f.t.
4.1	20.0
13.2	30.0
32.7	40.0
56.9	50.0
80.5	60.0

Dioxane ($C_4H_8O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f.t.
61.6	-3.3 E
70.2	0
90.1	10

Dioxane ($C_4H_8O_2$) + α -Methyl- α -ethyl-succinic acid ($C_7H_{12}O_4$)

Berner and Leonardsen, 1939

%	d	(α) _D
	20°	
8.584	1.0474	6.56
17.185	1.0573	6.25
27.524	1.0646	5.82

Paraldehyde ($C_6H_{12}O_3$) + Acetic acid ($C_2H_4O_2$)

Muchin, 1913

a	d	η
	20°	
0.0000	1.0478	1219.3
0.5488	.0476	1218.9
0.9380	.0475	1220.4
2.7440	.0473	1226.3
4.6902	.0464	1221.8
8.5345	.0416	1240.4
13.7200	.0400	1245
23.4512	.0355	1252
42.6728	.0245	1259
	15°	
0.0000	1.0466	1328.7
0.3418	.0465	1330.3
1.7090	.0460	1330.7
4.7726	.0445	1344.9
8.5345	.0416	1379.3
23.8632	.0315	1476.0
42.6728	.0190	1522.0

b	d	η
	20°	
0.0000	0.9948	1178
0.5721	.9950	1199.9
1.1984	.9953	1207.7
2.2884	.9958	1217.0
5.9728	.9978	1244.8
11.4424	1.0012	1255.2
20.8600	.0100	1254.2
	15°	
0.0000	0.9905	1316.1
0.5721	.9905	1340.6
1.1984	.9910	1342.8
2.2884	.9915	1347.7
5.9720	.9958	1368.6
11.4424	1.0981	1393.7
29.8600	.0064	1478.3

a= g paraldehyde in 100cc acid

b= g acid in 100cc paraldehyde

Lecat, 1949

%	b.t.	Dt mix.
0	116.4	-
30	-	-2.1
35	115.05 Az	-
100	118.1	-

Thiophane (C_4H_8S) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	118.8
73	94.5 Az
100	100.75

Thiophane (C_4H_8S) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	118.8
47	113.5 Az
100	118.1

Epichlorhydrin (C_3H_5OCl) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	116.4	-
30	-	-2.1
35	115.05 Az	-
100	118.1	-

XXIX. CETONES + HYDROXYL DERIVATIVES .

Formaldehyde (CH_2O) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	α					
	red	yellow	green	pale blue	dark blue	viol.
	20°					
50.096	-12.58	-16.07	-18.66	-23.55	-24.95	-27.65
25.048	-6.03	-8.06	-10.70	-14.01	-16.45	-
12.524	-13.73	-16.29	-19.56	-23.95	-26.35	-
5.030	-4.37	-6.76	-6.96	-11.73	-13.12	-13.92
2.515	-6.76	-8.75	-11.13	-11.93	-15.90	-

Acetaldehyde (C_2H_4O) + Methyl alcohol (CH_4O)

Lander, 1948

mol%	n_D	
	initial	final
	0°	
100	1.33174	-
84	.33787	1.35266
75	.34140	.36229
66	.34213	.37375
54	.34376	.38178
38	.34179	.37435
19	.34039	.35661
0	.33673	-

Acetaldehyde (C_2H_4O) + Ethyl alcohol (C_2H_6O)

de Leeuw, 1911 and Smiths and de Leeuw, 1911

mol%	f.t.	mol%	f.t.
0	-123.3	55.47	-125.3
8.69	-125.4	60.50	-128.05
16.10	-127.6	65.67	-123.2
19.81	-132	70.75	-126.8
22.66	-126.0	74.94	-132.2
25.55	-126.5	82.63	-130.6
33.99	-124.3	90.22	-120.6
40.30	-123.5	100	-114.9
49.27	-122.3		

(1+1)

THIOPHANE + FORMIC ACID

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Lecat, 1949

%	b.t.	Dt mix.
0	116.4	-
30	-	-2.1
35	115.05 Az	-
100	118.1	-

Thiophane (C_4H_8S) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.
0	118.8
73	94.5 Az
100	100.75

Thiophane (C_4H_8S) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.
0	118.8
47	113.5 Az
100	118.1

Epichlorhydrin (C_3H_5OCl) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	116.4	-
30	-	-2.1
35	115.05 Az	-
100	118.1	-

XXIX. CETONES + HYDROXYL DERIVATIVES .

Formaldehyde (CH_2O) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	α					
	red	yellow	green	pale blue	dark blue	viol.
	20°					
50.096	-12.58	-16.07	-18.66	-23.55	-24.95	-27.65
25.048	-6.03	-8.06	-10.70	-14.01	-16.45	-
12.524	-13.73	-16.29	-19.56	-23.95	-26.35	-
5.030	-4.37	-6.76	-6.96	-11.73	-13.12	-13.92
2.515	-6.76	-8.75	-11.13	-11.93	-15.90	-

Acetaldehyde (C_2H_4O) + Methyl alcohol (CH_4O)

Lander, 1948

mol%	n_D	
	initial	final
	0°	
100	1.33174	-
84	.33787	1.35266
75	.34140	.36229
66	.34213	.37375
54	.34376	.38178
38	.34179	.37435
19	.34039	.35661
0	.33673	-

Acetaldehyde (C_2H_4O) + Ethyl alcohol (C_2H_6O)

de Leeuw, 1911 and Smiths and de Leeuw, 1911

mol%	f.t.	mol%	f.t.
0	-123.3	55.47	-125.3
8.69	-125.4	60.50	-128.05
16.10	-127.6	65.67	-123.2
19.81	-132	70.75	-126.8
22.66	-126.0	74.94	-132.2
25.55	-126.5	82.63	-130.6
33.99	-124.3	90.22	-120.6
40.30	-123.5	100	-114.9
49.27	-122.3		

(1+1)

mol%		b.t.	
L	V		
699mm			
0	-	10.1	
18.8	-	15.3	
30.3	-	19.6	
42.2	-	34.7	
51.8	2.6	40.1	
65.4	14.8	48.8	
79.5	30.8	57.7	
89.2	48.9	65.3	
100	-	76.1	
398mm			
0	-	5.8	
18.8	-	11.0	
30.3	-	15.9	
42.2	-	21.9	
48.5	4.5	29.2	
57.7	-	32.3	
65.4	8.3	37.2	
77.4	32.9	45.4	
88.6	55.5	53.2	
100	-	62.8	
97mm			
0	-	-23.9	
33.6	-	-15.7	
46.2	-	-7.3	
48.4	-	-1.8	
53.5	-	+3.6	
-	5.2	5.4	
59.1	-	7.8	
-	9.0	8.5	
63.1	-	11.1	
68.4	20.5	15.9	
75.2	-	21.2	
-	32.2	22.3	
79.7	34.7	23.3	
84.5	-	25.1	
89.8	-	27.8	
-	61.2	29.7	
-	65.7	29.9	
93.1	75.9	30.1	
-	79.1	31.4	
100	-	34.3	

mol%		mol%	
η		η	
18°			
0	244	62.55	1552
18.21	402	68.42	1546
25.02	519	77.50	1495
37.34	833	78.42	1489
46.80	1217	89.56	1377
56.85	1472		
mol%		mol%	
n_D		n_D	
18°			
0	1.3392	62.55	1.3784
18.21	.3538	68.42	.3784
25.02	.3614	77.59	.3764
37.34	.3718	78.42	.3727
46.50	.4775	89.56	.3720
56.85	.3790	100	.3601

Adkins and Broderick, 1928			
%		%	
n_D		n_D	
8°			
100	1.36424	31.9	1.37762
88.1	.37134	24.5	.36424
66.9	.38266	15.9	.37480
59.8	.38533	9.2	.35686
44.9	.38506	4.3	.35097
43.7	.38612	0	.34445

De Leeuw, 1911	
Q reaction (cal/mole)	
mol%	
18.90	+ 396.2
32.83	+ 516.2
35.22	+ 554.5
41.88	+ 675.3
45.30	+ 737.1
47.15	+ 859.9
43.86	+ 962.8
50.27	+ 1000.8
55.78	+ 998.2
57.56	+ 980.6
57.89	+ 987.2
60.94	+ 949.5
65.78	+ 897.4
69.41	+ 781.2
70.90	+ 788.5
72.91	+ 711.8
75.25	+ 657.0
83.79	+ 365.5

Acetaldehyde (C_2H_4O) + Isopropyl alcohol (C_3H_8O)

Adkins and Broderick, 1928

%	n_D	%	n_D
8°			
100	1.38516	29.4	1.36864
86.7	.38391	25.8	.36552
66.4	.38247	19.0	.30044
57.4	.38008	7.9	.35193
47.3	.37640	4.2	.34941
35.6	.37218	0	.34445

Acetaldehyde (C_2H_4O) + Tert-Butyl alcohol
($C_4H_{10}O$)

Adkins and Broderick, 1928

%	n_D
8°	
100	1.38684
50	.37470
0	.34445

Acetaldehyde (C_2H_4O) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossman and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
50.576	-17.60	-20.37	-25.01	-31.04	-34.40	-37.27
25.288	-19.18	-22.74	-28.27	-34.60	-38.95	-
12.644	-22.30	-28.79	-28.79	-32.51	-39.54	-
4.889	-12.48	-16.77	-23.93	-31.50	-40.50	-44.18
2.4445	-23.73	-27.41	-30.27	-36.82	-39.27	-

Propionaldehyde (C_3H_6O) + Methyl alcohol (CH_4O)

Mc Kenna, Tartar and Lingafalter, 1949

mol%	f. t.	E	tr. t.
0	-80.05	-	-
9.4	-96.15	-114.9	-
15.1	-112.2	-114.9	-
24.9	-91.17	-114.9	-
35.3	-74.84	-114.9	-
50.2	-66.75	-	-117.3
60.6	-75.49	-134.0	-118.5
70.6	-101.1	-134.0	-120.5
79.3	-132.9	-134.0	-
85.9	-114.0	-134.0	-118.4
98.2	-99.53	-134.0	-114.3
100.0	-98.02	-	-113.5 (1+1)

Propionaldehyde (C_3H_6O) + Ethyl alcohol (C_2H_6O)

Pestemer and Bernstein, 1933

mol%	e	mol%	e
0	17.7	55	2.06
25	9.56	65	1.32
38.5	5.53	80	0.61
45	3.63	95	0.18
50	2.61	100	-

e = maximum extinction in ultra-violet.

Butyraldehyde (C_4H_8O) + Ethyl alcohol (C_2H_6O)

Adkins and Broderick, 1928

%	d	n_D
25°		
100	1.35828	0.7839
39.3	.39134	.8442
0	.37875	-

Butyraldehyde (C_4H_8O) + Tert.butyl alcohol
($C_4H_{10}O$)

Adkins and Broderick, 1928

%	n_D	%	n_D
25°			
100	1.38458	48.9	1.37932
95.2	.38360	33.1	.37837
86.9	.38333	20.1	.37772
78.7	.38237	18.4	.37861
69.1	.38094	7.5	.37743
58.9	.38018	0	.37875

Isobutyraldehyde (C_4H_8O) + Methyl alcohol (CH_4O)

Lecat, 1949

%	b. t.	Dt mix.
0	63.5	-
40	62.7	+3.5
100	64.65	-

Heptaldehyde ($C_7H_{14}O$) + Ethyl alcohol (C_2H_6O)

Adkins and Broderick, 1928

%	n_D	%	n_D
25°			
100	1.35928	38.9	1.40419
88.7	.36708	28.9	.40855
79.5	.37452	18.0	.41113
69.2	.38266	9.9	.41103
59.6	.38979	4.5	.41028
48.8	.39768	0	.40884

Heptaldehyde ($C_7H_{14}O$) + Isopropyl alcohol
(C_3H_8O)

Adkins and Broderick, 1928

%	n_D	%	n_D
25°			
100	1.36994	37.4	1.39945
88.3	.38113	30.2	.40350
82.8	.38381	19.4	.40577
80	.37640	10.6	.40765
60	.39318	8.1	.40835
49.6	.39699	0	.40884

Heptaldehyde ($C_7H_{14}O$) + Heptyl alcohol ($C_7H_{16}O$)

Mc Kenna, Tartar and Lingafalter, 1949

mol%	f. t.	E	mol%	f. t.	E
0.0	-43.71	-	48.9	2.25	-
3.7	-46.11	-58.92	59.4	0.47	-50.02
7.4	-50.44	-58.92	66.2	-4.16	-
10.8	-	-58.92	71.5	-10.31	-
14.3	-48.15	-58.92	77.7	-26.04	-
18.7	-34.52	-58.87	79.4	-32.97	-50.07
23.8	-19.69	-58.92	82.9	-44.92	-50.13
29.6	-7.85	-	84.9	-49.06	-50.13
35.3	-1.98	-	87.7	-45.27	-50.13
40.1	+0.33	-	100	-34.03	-
45.6	1.57	-58.44			

(1+1)

Citronellal ($C_{10}H_{18}O$) (b.t.=208.0) + Alcohols.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix. or Sat. t.
Glycol	($C_2H_6O_2$)	197.4	53	188.5	165
Benzyl alcohol	(C_7H_8O)	205.25	56	203.0	+7.5
Isoamyl lactate	($C_8H_{16}O_3$)	202.4	-	202.2	-

Benzaldehyde (C_7H_6O) + Methyl alcohol (CH_4O)

Weissenberger, Schuster and Henke, 1925

mol%	p	mol%	p
20°			
33.3	55.9	66.7	90.0
50.0	78.9	71.4	92.2
60.0	87.0	75.0	91.5

Benzaldehyde (C_7H_6O) + Ethyl alcohol (C_2H_6O)

Adkins and Broderick, 1928

%	d	n_D	%	d	n_D
25°					
100	0.7839	1.35828	37.3	0.9391	1.46562
92.2	.8020	.37050	32.7	.9499	.47429
83.3	.8251	.38448	16.0	.9935	.50774
63.7	.8728	.41702	16.1	1.0155	.52387
53.3	.8933	.43770	3.9	.0300	.53423
43.5	.9225	.45567	0	.0403	.54254

Dunstan, 1904

%	η	%	η
25° 2 nd series			
100	1113	100	1113
88.35	1092	82.34	1052
79.33	1050	69.58	1031
76.40	1051	0	1321
67.53	1041		
46.04	1158		
20.68	1308		
9.37	1362		
0	1445		

Benzaldehyde (C_7H_6O) (b.t.=179.2) + Alcohols.
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Heptyl alcohol	($C_7H_{16}O$)	176.15	55	174.5	-
Isooctyl alcohol	($C_8H_{18}O$)	180.4	40	176.5	+2.0 (10%)
Glycol	($C_2H_6O_2$)	197.4	15	173.5	-

Benzaldehyde (C_7H_6O) + Glycerol ($C_3H_8O_3$)

Bingham, 1907

C.S.T. = 100°

Mc Ewen, 1923

%	sat. t.	%	sat. t.
2.98	85.5	50.78	160.3
5.46	107.5	73.37	144.5
9.90	127.5	76.13	140.0
22.87	152.5	87.58	123.5
37.70	159.5	92.26	103.5
44.71	160.7	95.47	67.5

Benzaldehyde (C_7H_6O) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
20°						
49.938	-7.81	-8.71	-10.11	-11.71	-12.72	-13.22
24.969	-8.45	-9.89	-12.05	-14.58	-16.02	-
12.4845	-9.69	-11.61	-13.86	-17.30	-18.42	-
5.131	-9.74	-11.69	-14.03	-17.54	-19.49	-22.02
2.5655	-8.97	-10.52	-13.64	-16.76	-17.93	-

Benzaldehyde (C_7H_6O) + Isobutyl lactate ($C_7H_{14}O_3$)
Lecat, 1949

%	b.t.
0	179.2
8	178.8 Az
100	182.15

Benzaldehyde (C_7H_6O) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Mc Donald, 1909

t	d	t	d
0%		35.5%	
18.5	1.0517	17.7	1.105
20.0	.0498	20.0	.1027
31.65	.0398	22.2	.101
9.97%		31.15	.092
18.05	1.0650	78.75%	
20	.0634		
21.5	.0620	20	1.171
31.1	.054	60	.125
42.4	.043		

t	(α) _D	t	(α) _D	t	(α) _D
9.97%		35.5%		78.75%	
19.9	42.8	14.4	32.0	20	15.72
20	42.4	20	31.3	34.2	16.07
38.8	39.2	23.3	31.01	47.8	16.42
49.6	37.8	37.4	29.85	64	17.09
60.3	35.9	58.5	28.5	81	17.41
78	33.3	75	27.36	87.4	17.51
100	29.7	79	27.08	100	17.6
		100	25.4		

Patterson and Montgomerie, 1909

67.59 vol%	35.5 wt%	Dv = -0.24%
50 vol%	Dt = +0.35°	

Benzaldehyde (C_7H_6O) + Butoxyglycol ($C_6H_{14}O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	179.2	-
46	-	-1.4
91	170.95 Az	-
100	171.15	-

Anisaldehyde ($C_8H_8O_2$) + Ethyl alcohol (C_2H_6O)

Adkins and Broderick, 1928

%	n_D	%	n_D
25°			
100	1.35828	38.1	1.47518
87.5	.33008	23.0	.51040
76.5	.39876	15.3	.52992
65.9	.41782	7.8	.54966
54.7	.44012	4.6	.55733
45.5	.45956	0	.57004

Anisaldehyde ($C_8H_8O_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
20°						
49.968	-7.20	-8.41	-9.31	-11.71	-13.01	-13.51
24.984	-9.45	-11.85	-13.65	-16.93	-18.57	-
12.492	-11.29	-14.01	-16.73	-20.49	-22.57	-
4.891	-11.45	-14.31	-16.97	-21.92	-26.53	-28.83
2.4455	-10.22	-11.86	-13.09	-18.81	-21.26	-

Anisaldehyde ($C_8H_8O_2$) + Diglycol ($C_4H_{10}O_3$)

Lecat, 1949

%	b. t.	
0	249.5	
-	244.0	Az
100	245.5	

Cinnamaldehyde (C_9H_8O) + Ethyl alcohol (C_2H_6O)

Zecchini, 1897

%	t	d	n_D
0	8.1	1.08727	1.60025
63.10	8.2	0.89410	1.44078
100	8.1	0.80201	1.36630

Cinnamaldehyde (C_9H_8O) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
20°						
50.019	-6.70	-7.90	-8.70	-10.50	-11.40	-11.70
25.0095	-6.76	-7.96	-9.24	-11.32	-12.28	-
12.5048	-6.56	-8.08	-8.64	-11.04	-11.68	-
5.098	-3.73	-5.30	-6.47	-10.79	-11.38	-12.36
2.549	-3.53	-5.10	-6.28	-7.85	-8.24	-
1.2155	-7.82	-9.05	-10.28	-11.93	-12.75	-
0.60775	-5.76	-6.58	-7.40	-11.52	-12.34	-
0.30388	-3.29	-4.94	-6.58	-9.87	-9.87	-

Cinnamic aldehyde (C_9H_8O) + Cinnamic alcohol
($C_9H_{10}O$)

Lecat, 1949

%	b. t.	
0	253.5	
-	252.3	Az
100	257.0	

Furfural ($C_5H_4O_2$) + Methyl alcohol (CH_4O)

Andreev and Zirlin, 1954

%		%	
L	V	L	V
755 mm			
1.20	82.32	48.07	96.12
2.96	86.48	59.62	94.76
6.00	92.40	65.90	96.62
7.60	89.40	71.40	96.69
10.00	95.60	77.80	97.18
15.20	93.00	89.71	98.66
20.67	94.04	90.50	99.33
37.70	95.20	94.55	99.31
40.28	96.12	95.88	99.58
44.19	96.57		
300 mm			
3.50	52.20	30.00	94.20
4.20	48.40	50.00	96.02
5.35	68.90	75.00	96.79
10.00	79.20	90.00	98.43
15.00	88.80		(sic)

Orange oil + Ethyl alcohol (C_2H_6O)

Dewar and Jones, 1908

Rotatory power.

Furfural (C ₅ H ₄ O ₂) (b.t.=161.45) + Alcohols. Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix.
Hexyl alcohol	(C ₆ H ₁₄ O)	157.85	56	154.1	-5.6 (83%)
Heptyl alcohol	(C ₇ H ₁₆ O)	176.15	6	160.9	-2.5 (10%)
Propoxy-glycol	(C ₅ H ₁₂ O ₂)	151.35	86	151.1	-1.1 (67%)
Butoxy-glycol	(C ₆ H ₁₄ O ₂)	171.15	12	161.2	-1.5 (50%)
Cyclo-hexanol	(C ₆ H ₁₂ O)	160.8	45	156.4	-6.8 (50%)
Methyl cyclohexanol	C ₇ H ₁₄ O	168.5	26	158.6	-4.7 (20%)

Chloral (C ₂ HOC ₂ Cl ₃) + Ethyl alcohol (C ₂ H ₆ O)					
Leopold, 1909					
mol%	f.t.	mol%	f.t.		
100	-130.5	50	46.6		
90	-70	49.3	45.9		
80	-23	47.3	45.0		
75	+2	39.6	38		
69	16	33.3	30		
60	34.7	26.2	21		
62.4	45.2	15.0	1		
51.0	45.9	7	-18		
49.6	46.2	0	-57.5		
(1+1)					
mol%	b.t.	p	mol%	b.t.	p
100	78.4	-	50	116.6	768.2
90	82.0	765.3	50	116.8	771.2
78.1	91.2	768	49.5	116.8	"
73.6	94.4	768	49	116.8	"
72.7	98.0	768	48	116.2	"
69.2	103.4	768.1	47	116.0	"
64.6	109.6	768.2	46	115.7	"
61.0	113.2	"	44.7	115.4	"
55.5	115.6	"	43	114.8	771.0
53.0	116.1	"	41	114.4	"
52	116.2	"	25	107.4	760.0
51	116.4	"	0	97	740
50.5	116.4	"			

t	p	t	p	t	p
0%		sat.sol.L ₁		sat.sol.L ₂	
20.5	1.4	20.5	10.0	20.5	15.7
25	2.2	25	11.4	25	17.7
30	3.8	30	14.8	30	20.2
35	6.1	35	17.9	35	21.8
40	9.9	37.5	18.9	36	22.0
43	12.9	40	19.9	38	22.1
45	15.3	41	19.8	40	21.8
46	16.7	42	19.8	41	21.4
46.6	17.5	44	19.2	42	20.9
48	19.2	45	18.7	43	20.4
50	22.0	46	17.8	44	19.7
55	31.8	46.4	18.1	45	19.1
46	16.8	47	18.7	45.6	18.5
44	14.6	48	20.0	46	18.4
40	10.7	50	22.8	45	21.0
35	7.0	55	32.8	46	22.4
30	5.0	44.5	15.7	46.5	-
		42	13.0	48	-
		40	11.2	50	28.8
		38	9.7	55	39.6
		36	8.3	45	-
				43	18.4
				40	15.3
				35	10.8
				30	7.8
				25	5.5

Lecat, 1949	
%	b.t.
0	97.75
-	116.2 Az
100	78.3

Kurnakov and Efremov, 1913			
%	d		
	40°	45°	50°
100	0.7730	0.7688	0.7642
73.76	.9233	.9134	.9035
63.84	.9862	.9803	.9725
55.54	1.0526	1.0471	1.0417
48.37	.1166	.1118	.1026
42.15	.1756	.1695	.1634
31.90	.2830	.2764	.2700
29.71	.3087	.3001	.2912
27.63	.3307	.3225	.3144
25.66	.3530	.3445	.3338
24.53	.3637	.3561	.3464
23.80	.3708	.3625	.3542
20.35	.3932	.3862	.3776
17.24	.4098	.4031	.3920
11.80	.4369	.4293	.4217
9.52	.4495	.4426	.4353
7.24	.4639	.4556	.4473
3.36	.4874	.4789	.4688
0	.4917	.4818	.4730

Kurnakov and Efremov, 1913

%	60°	d 70°	85°
100	0.7550	0.7458	-
73.76	.8988	.8900	0.8768
63.84	.9628	.9530	.9425
55.54	1.0310	1.0200	1.0035
48.37	.0971	.0812	.0662
42.15	.1517	.1397	.1217
31.90	.2565	.2423	.2223
29.71	.2791	.2671	.2436
27.63	.3022	.2857	.2610
25.66	.3209	.3053	.2807
24.53	.3325	.3154	.2908
23.80	.3384	.3218	.2969
20.35	.3611	.3422	.3229
17.24	.3787	.3591	.3407
11.80	.4068	.3907	.3697
9.52	.4201	.4037	.3827
7.24	.4308	.4140	.3903
3.36	.4517	.4351	-
0	.4546	.4361	.4073

Mathews and Cooke, 1914

t	d	t	d
25.7%			
40	1.36652	60	1.32023
45	.34468	70	.30432
50	.33381	85	.28070

Springer and Roth, 1930

%	d
0°	
100	0.8058
80	0.9163
60	1.055
0	1.557

Ohlm, 1913

c	η	Diffusion ratio
20°		
2	-	0.50
1	1680	0.53
0.5	1503	-
0.15	1397	-
0	1278	-

c = molality of chloral

Kurnakov and Efremov, 1913

%	40°	η 45°	50°
100	796	720	657
73.76	1126	1031	939
63.84	1406	1271	1141
55.54	1753	1569	1397
48.37	2200	1951	1702
42.15	2783	2383	2074
31.90	4053	3366	2848
29.71	4352	3580	3000
27.63	4632	3769	3141
25.66	4757	3854	3201
24.53	4703	3788	3143
23.80	4565	3673	3064
20.35	3937	3201	2706
17.24	3311	2737	2392
11.80	2258	1989	1757
9.52	1976	1724	1530
7.24	1755	1542	1380
3.36	1351	1219	1120
0	1009	934	869

%	60°	η 70°	85°
100	556	485	-
73.76	789	659	477
63.84	946	780	576
55.54	1131	929	690
48.37	1338	1082	807
42.15	1596	1262	922
31.90	2119	1599	1105
29.71	2225	1743	1163
27.63	2278	1717	1190
25.66	2315	1705	1186
24.53	2305	1715	1170
23.80	2217	1680	1168
20.35	2045	1568	1101
17.24	1834	1450	1021
11.80	1424	1164	868
9.52	1251	1060	800
7.24	1152	966	739
3.36	961	827	557
0	779	677	

Mathews and Cooke, 1914

t	η	t	η
25.7%			
40	4757	60	2314
45	3853	70	1739
50	3201	85	1186

Springer and Roth, 1930

%	η (water=1)	%	η (water=1)
0°			
100	1.059	60	2.942
80	1.576	0	1.513

Chloral ($C_2HOC_2H_5$) + Isobutyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b.t.
0	97.75
-	138 Az
100	108.0

Chloral ($C_2HOC_2H_5$) + Dimethylethylcarbinol
($C_7H_{12}O$)

Efremov, 1913 and 1918

mol%	wt%	d				
		25°	40°	50°	70°	85°
0	0	0.8060	0.7920	0.7821	0.7605	0.7441
10	15.68	.8878	.8718	.8613	.8375	.8152
20	29.50	.9660	.9500	.9389	.9134	.8938
30	41.78	1.0507	1.0352	1.0204	.9931	.9689
40	52.74	.1387	.1205	.1019	1.0730	1.0449
42.5	55.26	.1678	.1374	.1209	.0908	.0626
45	57.79	.1791	.1589	.1422	.1082	.0794
48.5	60.20	.2002	.1748	.1552	.1263	.0975
50	62.60	.2191	.1986	.1824	.1435	.1139
55	67.17	.2576	.2351	.2162	.1796	.1504
60	71.50	.2915	.2690	.2510	.2678	.1788
70	79.60	.3573	.3363	.3175	.2787	-
75	83.30	.3908	.3676	.3475	.3097	-
80	87.00	.4229	.4002	.3839	.3431	.3137
90	93.77	.4763	.4513	.4367	.4008	.3753
100	100	.5049	.4917	.4730	.4361	.4073

mol%	wt%	η				
		25°	40°	50°	70°	85°
0	0	3697	1975	1401	798	573
10	15.68	3809	2142	1513	881	562
20	29.50	5190	2746	1907	1042	733
30	41.78	6882	3502	2332	1223	837
40	52.74	8576	4063	2625	1333	929
42.5	55.26	8813	4163	2754	1380	958
45	57.79	8897	4193	2792	1396	928
48.5	60.20	8988	4233	2812	1388	"
50	62.60	8992	4226	2784	1382	923
55	67.17	8512	4047	2633	1346	911
60	71.50	7391	3733	2541	1284	898
70	79.60	5018	2959	2112	1133	"
75	83.30	3322	2413	2827	1098	"
80	87.00	2929	2016	1599	1041	798
90	93.77	1942	1633	1311	891	701
100	100	1263	1009	869	677	557

Chloral ($C_2HOC_2H_5$) + Allyl Alcohol (C_3H_6O)

Efremov, 1928

mol%	d				
	25°	40°	50°	70°	85°
100	0.8484	0.8348	0.8257	0.8067	0.7921
90	.9612	.9468	.9372	.9165	.9003
85	1.0196	1.0023	.9902	.9715	.9495
80	.0754	.0604	1.0499	1.0279	1.0102
75	.1320	.1103	.1002	.0850	.0598
70	.1875	.1714	.1574	.1367	.1151
65	.2370	.2207	.2063	.1852	.1627
60	.2838	.2655	.2529	.2460	.2020
57.5	.3067	.2870	.2737	.2632	.2213
55	.3278	.3080	.2937	.2632	.2350
52.50	.3493	.3284	.3140	.2919	.2555
50	.3636	.3399	.3252	.2989	.2651
47.50	.3732	.3479	.3326	.3134	.2750
45	.3891	.3642	.3481	.3280	.2887
40	.4050	.3807	.3637	.3531	.3025
35	.4318	.4085	.3919	.3742	.3246
30	.4482	.4232	.4075	.3911	.3446
25	.4653	.4433	.4250	.4052	-
20	.4754	.4579	.4404	.4183	-
15	.4910	.4683	.4530	.4271	-
10	.4987	.4753	.4620	.4357	-
0	.5037	.4860	.4711	.4361	-
	.5048	.4917	.4730	-	-

mol%	wt%	η				
		25°	40°	50°	70°	85°
0	0	1263	916	765	548	432
10	22.01	1806	1271	1025	696	540
15	30.42	2226	1539	1211	822	610
20	38.83	2780	1835	1433	942	710
25	45.48	3561	2303	1722	1082	808
30	52.12	4606	2801	2078	1247	898
35	57.50	6172	3411	2463	1419	1007
40	62.87	7633	3990	2813	1565	1099
42.5	65.19	8439	4337	3006	1642	1141
45	67.51	9281	4658	3144	1704	1163
47.5	69.68	9880	4880	3317	1744	1209
49	70.92	10361	4916	3346	1766	1225
50	71.75	10435	4918	3349	1768	1231
52.5	73.69	10133	4863	3324	1750	1223
55	75.63	9536	4612	3208	1705	1175
60	79.21	8109	4052	2861	1600	1120
65	82.40	6304	3430	2507	1455	1034
70	85.57	4657	2852	2156	1285	-
75	88.31	3672	2386	1856	1208	-
80	91.04	2890	1972	1588	1057	-
85	93.43	2262	1603	1321	931	-
90	95.81	1763	1303	1107	825	-
100	100	1263	1009	869	677	-

Chloral (C_2HOC1_3) + Methyl malate I ($C_6H_{10}O_5$)								mol% 60° 80°			
Grossmann and Landau, 1910											
g/100cc	(α)										
	red	yellow	green	pale blue	dark blue		viol.				
20°											
50.718	-61.22	-77.09	-93.26	-116.13	-128.85	-141.47		100	8254	3721	
25.478	-64.17	-80.07	-97.14	-123.44	-134.43	-146.40		87.81	9350	4145	
12.687	-59.12	-74.88	-94.19	-115.47	-125.72	-138.72		80.02	10065	4409	
4.932	-58.80	-74.61	-93.67	-114.95	-125.29	-137.86		75.09	10440	4547	
2.451	-56.30	-71.40	-86.09	-107.30	-116.28	-130.15		70.16	10492	4576	
								65.01	10495	4587	
								60.24	10199	4493	
								55.15	9316	4178	
								50.40	7757	3602	
								40.49	3994	2388	
								29.78	2054	1432	
								20.27	1327	1008	
								10.83	931	743	
								0	701	565	
Chloral (C_2HOC1_3) + Ethyl tartrate(+) ($C_8H_{14}O_6$)								Chloral (C_2HOC1_3) + Benzyl alcohol (C_7H_8O)			
Grossmann and Landau, 1910								Udovenko and Khomenko, 1956.			
g/100cc	(α)							mol% 25° 50° 75°			
	red	yellow	green	pale blue	dark blue		viol.				
20°											
50.668	+51.71	+65.23	+76.38	+92.37	+98.58	+107.76		100.00	1.0190	1.0006	0.9819
26.206	58.77	70.79	85.10	102.84	112.95	124.21		90.14	1.1071	1.0862	1.0661
13.172	56.56	69.09	81.61	101.35	108.18	119.57		81.09	1.1674	1.1454	1.1225
5.329	55.92	68.49	81.07	100.02	107.71	118.78		72.05	1.2312	1.2083	1.1829
2.658	55.30	67.72	80.14	99.32	106.85	117.76		74.38	1.2843	1.2592	1.2339
								59.36	1.3215	1.2944	1.2650
								56.36	1.3424	1.3142	1.2837
								52.49	1.3678	1.3352	1.3053
								50.70	1.3780	1.3460	1.3118
								50.02	1.3817	1.3510	1.3170
								46.05	1.3942	1.3632	1.3288
								40.75	1.4194	1.3887	1.3531
								33.21	1.4387	1.4075	1.3732
								24.36	1.4600	1.4233	1.3909
								11.73	1.4906	1.4557	1.4123
								0.00	1.5013	1.4603	1.4186
Chloral (C_2HOC1_3) + Cyclohexanol ($C_6H_{12}O$)								mol% 25° 50° 75°			
Udovenko and Khomenko, 1956.											
mol%	d 60° 80°										
100	0.9187			0.9019				100	5212	2548	1501
87.81	1.0019			0.9831				90.14	7956	3521	1934
80.02	1.0544			1.0334				80.09	12340	4774	2422
75.09	1.0900			1.0700				72.05	18570	6410	2948
70.16	1.1234			1.1014				64.38	21830	6783	3175
65.01	1.1633			1.1397				59.36	40420	9558	3772
60.24	1.1925			1.1688				56.36	50350	10850	4165
55.15	1.2317			1.2065				52.49	55160	10570	3888
50.40	1.2647			1.2388				50.70	54240	10210	3873
40.49	1.3098			1.2830				50.02	51180	10010	3779
29.78	1.3456			1.3181				46.05	39890	8491	3258
20.27	1.3778			1.3511				40.75	24530	6780	2953
10.83	1.4076			1.3794				33.21	9262	3796	2066
0	1.4413			1.4096				24.36	2888	1639	1115
								11.73	2072	1307	922
								0	1055	764	588

Bromal ($C_2H_3OBr_3$) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.550	-42.04	-52.42	-64.69	-77.84	-84.57	-92.58
25.142	-50.12	-64.63	-77.76	-90.49	-100.63	-110.17
12.791	-58.24	-70.75	-84.43	-100.46	-111.41	-123.92
4.826	-61.54	-76.05	-89.52	-104.85	-113.14	-124.33
2.417	-61.65	-76.13	-89.78	-105.09	-113.36	-124.53

Bromal ($C_2H_3OBr_3$) + Ethyl tartrate ($C_8H_{14}O_6$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.073	+26.96	+32.05	+38.44	+45.33	+47.53	+50.33
25.355	32.93	42.99	50.09	57.19	61.33	67.25
12.616	36.07	46.05	53.27	60.24	63.33	72.66
5.092	37.51	48.11	55.38	63.83	68.34	72.66
2.646	37.79	48.37	55.93	63.87	68.78	72.94

Acetyl chloride (C_2H_3OCl) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.199	-23.90	-29.38	-34.66	-41.44	-45.42	-50.40
25.0995	-25.10	-30.48	-35.66	-42.43	-46.42	-
12.5498	-24.46	-29.88	-35.06	-41.83	-45.82	-
5.426	-20.27	-25.43	-29.49	-35.94	-38.70	-41.84
2.713	-19.90	-25.06	-29.12	-35.39	-37.97	-

Benzoyl chloride (C_7H_5OCl) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.672	-3.28	-4.05	-4.39	-4.53	-4.51	-4.33
24.836	-2.21	-2.50	-2.38	-2.25	-2.09	-
12.418	-1.05	-1.29	-1.05	-0.72	-0.40	-
4.805	-0.21	0.00	+0.21	+0.62	+0.83	+1.25
2.4025	+1.66	+2.08	+2.50	+3.33	+3.75	-

Acetone (C_3H_6O) + Methyl alcohol (CH_4O)
Heterogeneous equilibria.

Pettit, 1899

%	b.t.	%	b.t.
760 mm			
100.0	65.52	45.0	57.65
89.1	63.44	31.0	56.68
80.5	61.98	23.1	56.29
58.6	58.96	18.6	56.09
53.7	58.52	13.2	55.99
51.9	58.34	6.6	56.09
49.0	58.02	0.0	56.62

Haywood, 1899

%	b.t.	%	b.t.
765 mm			
0	56.65	48.2	57.75
2.8	56.4	50.3	58.0
7.1	56.1	52.5	58.5
11.7	55.85	56.1	58.8
11.8	55.9	61.8	59.5
15.5	55.95	67.9	60.2
16.6	55.9	79.1	61.8
24.1	56.1	92.1	63.9
34.3	56.65	100	65.2
42.9	57.3		

Griswold and Buford, 1949

mol%	b.t.	mol%	b.t.
89.5	61.7	32.7	55.9
82.7	-	26.0	55.8
77.3	59.4	16.8	-
69.8	58.3	15.3	-
57.6	-	10	55.8
54.9	56.7	8.5	-
35.7	55.9	6.0	56.1

Amer, Paxton and van Winkle, 1953

mol%	b.t.	mol%	b.t.
100	64.6	48.7	56.2
96.4	63.5	43.7	56.0
94.2	62.8	41.6	55.9
91.9	62.2	31.7	55.8
87.9	61.1	31.2	55.8
80.9	59.6	25.8	55.8
79.4	59.4	24.6	55.8
73.1	58.4	17.7	55.8
70.7	58.1	16.8	55.8
64.4	57.3	13.9	55.8
60.6	56.9	0	56.1
54.7	56.5		

Lecat, 1949					
%		b.t.		Dt mix.	
0		56.15		-	
12		55.5 Az		-	
50		-		-4.3	
100		64.65		-	
Othmer, Friedland and Schiebel. (unpublished)					
b.t.		mol%		b.t.	
L		V		L	
V		L		V	
760 mm					
62.9	95.20	86.0	55.1	32.40	29.0
60.1	82.40	68.30	55.6	20.0	20.0
58.3	72.0	58.0	55.6	5.0	6.0
57.2	60.0	48.40	56.1	1.80	2.40
56.1	40.0	34.40			
Pettit, 1899					
p		b.t.		p	
L		V		L	
V		L		V	
734	56.67	56.40	737	58.77	57.07
734	56.43	56.30	"	59.17	57.47
734	56.28	56.14	"	59.77	57.71
734	56.22	56.10	"	60.77	58.47
734	56.17	56.08	"	61.67	59.29
734	56.02	55.98	"	62.47	60.17
735	56.16	55.93	"	62.89	60.63
735	56.30	55.95	"	63.33	61.31
735	56.40	55.95	"	63.77	61.83
735	56.54	56.08	"	64.46	62.93
737	56.94	56.15	"	64.76	63.43
737	57.04	55.27	"	64.97	63.77
737	57.46	56.45	"	65.22	64.49
737	58.52	56.91			
Bergstrom, 1913					
L		%		V	
760 mm					
4.1		4.7			
7.8		8.0			
8.2		8.6			
21.1		18.7			
Othmer, 1928					
b.t.		%		b.t.	
L		V		L	
V		L		V	
55.2	4.2	4.0	55.6	41.2	31.7
55.0	7.1	7.9	56.8	54.8	38.0
54.7	10.1	11.3	58.3	68.2	48.2
54.9	18.6	16.7	61.9	90.4	76.4
55.4	33.0	26.5			

Fordyce and Simonsen, 1949					
b.t.		%		b.t.	
L		V		L	
V		L		V	
100 mm					
-	100	100	10.8	51.0	35.0
17.6	89.0	77.5	9.2	29.5	19.5
15.8	80.0	64.0	8.0	14.5	11.5
12.6	66.0	49.0	7.4	0	0
Lang, 1950					
mol% at b.t.		mol% at b.t.			
L		V		L	
V		L		V	
760 mm					
4.1	5.1	29.7	28.2		
4.3	5.3	56.9	48.5		
10.0	12.2	67.6	56.0		
11.0	13.0	76.7	64.5		
18.2	19.2	78.2	65.9		
20.1	20.7	86.2	75.7		
21.3	21.8	93.6	87.0		
24.4	24.2	95.5	90.5		
Britton, Nutting and Horsley, 1952 (fig.)					
L		%		b.t.	
V		L		V	
b.t.		b.t.		b.t.	
200 mm					
0	0	22	80	56	31
20	18	23	90	64	33
40	24	24	100	100	35
60	37	27			
747 mm					
0	0	56	60	40	58
10	10	55	80	59	61
20	20	55.5	90	76	62.5
40	22	56.5	100	100	64
11.090 mm					
0	-	159	60	-	151.5
20	-	154	80	-	151.5
40	-	152	100	-	152

Buchmakine, Lizlova and Molodenko, 1953

mol%		mol%	
L	V	L	V
760 mm			
94.9	89.6	56.0	46.8
87.0	76.7	45.7	39.5
85.6	75.1	31.8	29.2
81.7	70.2	31.0	28.8
76.4	64.1	23.5	23.3
75.7	63.1	19.3	19.8
68.4	56.7	14.1	15.3
66.5	55.1	10.2	11.7
58.1	48.5	4.7	5.6
57.1	47.5		

Amer, Paxton and Van Winkle, 1956

b.t.		b.t.	
mol%		mol%	
L	V	L	V
760 mm			
64.6	100	100	56.2
63.5	96.4	91.8	55.9
62.2	91.9	83.9	55.8
60.7	85.9	74.9	55.8
59.4	79.4	66.4	55.8
58.1	70.7	57.7	55.8
56.9	60.6	50.0	56.1
			0
			0

Sapgir, 1929

%	f.t.	E	tr.t.
100	-97.8	-	-
84.1	-103.0	-	-
71.2	-108.7	-114.9	-
59.2	-111.7	-117.8	-
50.3	-115.7	-116.6	-111.7
36.1	-113.7	-115.6	-
27.7	-111.0	-113.9	-
22.5	-108.3	-	-
13.3	-104.1	-	-
0	-95.6	-	-

Properties of phases.

Hirobe, 1908

mol%	d	mol%	d
25.05°			
100	0.78842	59.657	0.79148
93.059	.79006	51.634	.79112
80.665	.79151	42.441	.79030
68.698	.79801	24.258	.78870
60.144	.79147	0	.78494

Doroshevski, 1911

%	d	%	d
15°			
0	0.79000	68.37	0.80049
11.95	.79924	92.00	.79764
23.97	.80066	100	.79602
49.71	.80145		

Barr and Bircumshaw, 1921

wt%	mol%	d	wt%	mol%	d
25°					
0	0	0.78502	69.7	80.6	0.79136
9.75	16.4	.78780	80.0	87.4	.79083
20.1	31.3	.78974	88.9	93.6	.78969
39.5	54.2	.79125	94.2	96.8	.78805
59.7	72.9	.79170	100	100	.78658

Burrows, 1926

%	d
25°	
0	0.78555
15.3	.78855
53.1	.79095
76.3	.78977

Tomonari, 1936

mol%	d	mol%	d
20°			
0	0.7908	60	0.7961
20	.7944	80	.7943
40	.7960	100	.7913

Griswold and Buford, 1949

mol%	d	mol%	d
25°			
89.5	0.78841	57.6	0.79035
82.7	.79005	35.7	.78865
77.3	.79001	15.3	.78644
69.8	.79051		

Jones and Getman, 1904 and Jones and Mc Master, 1906

vol%	η	
	0°	25°
1 st sample		
100	818.5	565.0
75	649.8	461.5
50	533.6	389.1
25	450.1	344.6
2 nd sample		
100	903.2	608.4
75	649.7	508.7
50	517.7	449.8
25	433.8	415.5
0	504.5	397.7

Jones and Mahin, 1909

mol%	η	
	0°	25°
100	857	583
75	734	517
50	596	433
25	471	370
0	429	346

Morgan and Scarlett, 1917

%	σ	
	0°	30°
0	25.192	21.578
33.25	25.088	21.775
39.88	25.004	21.747
49.84	24.877	-
49.92	-	21.689
59.83	24.673	-
100	23.643	21.058

Amer, Paxton and van Winkle, 1953

mol%	n_D	mol%	n_D
20°			
100	1.32904	54.7	1.34907
94.2	.33240	43.7	.35198
87.9	.33600	31.2	.35447
80.9	.33949	16.8	.35672
73.1	.34280	0	.35878
64.4	.34601		

Tomonari, 1936

%	n_D	%	n_D
20°			
0	1.35916	60	1.34317
20	.35460	80	.33640
40	.34922	100	.32911

Griswold and Buford, 1949

mol%	n_D	mol%	n_D
25°			
89.5	1.33228	35.7	1.35033
82.7	.33636	32.7	.35096
77.3	.33881	16.8	.33590
69.8	.34637	8.5	.33099

Heat constants

Nakamura, 1928

mol%	U	mol%	U
0	0.476	75	0.551
10	.484	90	.584
25	.492	100	.577
50	.529		

Hirobe, 1908

mol%	Q mix	mol%	Q mix
25.05°			
100	-	59.657	-151.8
93.059	-35.6	51.634	-160.3
80.665	-92.4	42.441	-164.0
68.698	-132.8	24.253	-129.3
60.144	-151.0	0	-

Acetone (C_3H_6O) + Ethyl alcohol (C_2H_6O)

Heterogeneous equilibria.

Thayer, 1899

%	b.t.	p	%	b.t.	p
0	55.6	742.9	54.69	63.42	739.1
3.18	55.53	742.9	59.14	64.22	739.1
14.54	57.30	742.7	63.26	65.15	739.4
22.57	58.39	742.7	69.92	66.79	739.4
33.03	59.90	742.4	73.98	67.92	739.4
39.01	60.72	742.2	82.14	70.51	739.4
47.07	61.82	742.2	88.59	72.83	739.4
54.50	63.29	741.9	100	77.70	739.4
Az: 81% 63.40 737.1 mm					

Duttey, 1950

mol%		b.t.	mol%		b.t.
L	V		L	V	
760 mm					
100	100	78.3	60	39.5	63.6
95	84.5	75.4	50	32.6	61.3
90	73.8	73.0	40	26.1	60.4
85	65.2	71.0	30	19.8	59.1
80	58.3	69.0	20	13.5	58.0
75	52.2	67.3	10	7.1	57.0
70	47.6	65.9	0	0	56.1
65	43.4	64.7			

Hellwig and van Winkle, 1953

b.t.		mol%		wt%	
V	L	V	L	V	L
56.2	0	0	0	0	0
57.0	3.10	12.5	6.5	10.2	
58.5	17.3	26.4	14.2	22.2	
60.7	27.4	42.0	23.0	36.5	
63.0	36.4	55.6	31.2	49.8	
65.2	44.5	66.1	38.9	60.7	
66.8	50.6	72.4	48.3	67.5	
70.1	62.4	82.5	56.8	78.9	
72.2	70.3	87.9	65.6	85.2	
75.1	82.4	94.2	79.1	92.8	
78.4	100	100	100	100	

Amer, Paxton and van Winkle, 1956

mol%		b.t.	mol%		b.t.
L	V		L	V	
760 mm					
100	100	78.3	58.6	63.4	63.4
96.7	88.9	76.4	46.8	30.3	61.3
92.2	78.4	74.0	30.9	20.4	59.0
85.1	65.5	70.8	14.8	10.4	57.3
80.5	59.0	69.1	0	0	56.1
68.4	46.6	65.6			

Amer, Paxton and van Winkle, 1953

mol%		b.t.	mol%		b.t.
L	V		L	V	
100	78.3	45.7	61.1		
91.9	73.8	35.1	59.6		
83.4	70.1	24.0	58.2		
74.6	67.3	12.3	57.1		
65.4	64.9	0	56.1		
55.8	62.8				

Sapgir, 1929

%	f.t.	E	%	f.t.	E
0	-95.6	-	75	-	-119.1
13.5	-100.0	-	79.5	118.7	-119.1
25.8	-102.1	-	90.4	116.6	-118.3
39.7	-104.8	-	100	114.1	-
56.5	-108.7	-118.9			

Properties of phases.

Jahn, 1891

c	d	(α) magn.
20°		
100	0.79476	84.90
23.175	0.79219	29.25
0	0.79009	0

c = g acetone in 100 cc

Hirobe, 1908

mol%		d	mol%		d
25.12°					
100	0.78607	53.999	0.78648		
89.471	.78645	44.169	.78598		
73.917	.78662	34.042	.78589		
63.252	.78651	17.098	.78556		
55.532	.78626	0	.78492		

Muchin, 1913

c	d	c	d
20°			
0.0000	0.7934	4.3276	0.7924
0.4809	.7932	9.6196	.7923
0.7375	.7931	15.6860	.7921
1.9239	.7928	18.4384	.7921
3.6876	.7925		

c = g acetone in 100 cc alcohol.

Mathews and Cooke, 1914

t	d
50 %	
0	0.8218
25	0.7965
40	0.7797

Barr and Bircumshaw, 1921

wt%	mol%	d	wt%	mol%	d
25°					
0	0	0.78502	76.4	80.5	0.78816
10.0	12.4	.78485	83.7	86.8	.78783
21.0	25.2	.78602	91.7	93.4	.78813
22.8	27.4	.78619	93.6	95.0	.78794
39.5	44.9	.78719	100	100	.78752
60.1	65.4	.78752			

Hammick and Andrew, 1929

mol%	d	mol%	d
25°			
0.00	0.7898	68.74	0.7892
18.79	.7902	100.00	.7882
45.08	.7900		

Springer and Roth, 1930

%	d	%	d
0°			
100	0.8058	48.63	0.8114
82.23	.8092	29.66	.8095
56.62	.8107	0	.81105

Graffunder and Heymann, 1931

mol%	d	mol%	d
25°			
0	0.7863	65.33	0.7866
12.25	.7863	74.56	.7864
23.90	.7864	83.42	.7862
35.00	.7865	92.79	.7860
45.58	.7866	100	.7857
55.68	.7868		

Tomonari, 1936

%	d	%	d
20°			
0	0.7908	60	0.7922
20	.7920	80	.7917
40	.7920	100	.7909

Dunstan, 1904

%	η	%	η
25°			
100	1115	56.62	516.2
77.54	716.8	55.50	502.8
72.23	651.0	48.43	462.0
64.89	579.7	29.66	383.6
63.17	563.6	0	312.5

Jones and Getman, 1904

and Jones and Mc Master, 1906

vol %	η	η
25°		
	0°	25°
	1 st sample	2 nd sample
100	1856	1106
75	1041	671.4
50	680.1	487.4
25	499	377.6
0	409.7	323.7
		504.5
		397.7

Hirata, 1908

%	η (alcohol=1)	%	η (alcohol=1)
25°			
75	0.6137	96.875	0.9355
87.5	0.7653	98.4375	0.9689
93.75	0.8695	99.21875	0.9905

Jones and Mahin, 1909				Hamrick and Andrew, 1929			
%		η		mol %		σ	
		0°	25°			25°	
100		2103	1180	0.00		21.90	
75		1131	726	18.79		22.12	
50		725	506	45.08		22.85	
25		522	398	68.74		22.63	
0		429	346	100.00		23.07	
Muchin, 1913				Tomonari, Trogus and Hess, 1932			
c		η		%		n	
		20°		C		D	
0.0000	1253	4.3276	1116	0	1.35715	1.35915	55
0.4809	1245	9.6196	964.3	10	.35760	.35956	60
0.7375	1226	15.6860	868.9	20	.35807	.35993	80
1.9239	1193	18.4384	809.0	40	.35872	.36057	90
3.6876	1127			50	.35903	.36086	
Mathews and Cooke, 1914				Tomonari, 1936			
t		η		%		n_D	
		50 %				20°	
0		770.0		0	1.35916	60	1.36166
25		529.2		20	.36028	80	.36184
40		420.4		40	.36107	100	.36181
Springer and Roth, 1930				Amer, Paxton and van Winkle, 1953			
%		(water=1)	(water=1)	mol %		n_D	
		0°				20°	
0	0.3062	56.62	0.4823	100	1.36152	45.7	1.36061
29.66	0.366	92.23	0.6064	91.9	.36158	35.1	.36022
48.63	0.435	100	1.0589	83.4	.36159	24.0	.35980
Morgan and Scarlett, 1917				74.6	.36143	12.3	.35927
%		σ		65.4	.36122	0	.35878
		0°	45°	55.8	.36097		
0	25.192	22.776	19.781	Pestemer, 1934			
15.02	-	22.633	-	c		e	
29.03	-	22.598	-				
29.94	-	22.506	-	13.69	15.6	4.80	5.00
40.06	-	22.406	-	10.91	12.1	3.25	3.51
50.03	24.297	22.302	19.831	9.54	10.05	1.62	1.65
59.94	-	22.175	-	6.88	7.15		
79.70	-	21.910	-	c = moles acetone in liter .			
90.02	-	21.752	-	e = extinction coefficient in ultra-violet .			
100	23.090	21.534	19.589				

Graffunder and Heymann, 1931			
mol%	ϵ	mol%	ϵ
25°			
0	20.87	65.33	21.75
12.25	20.70	74.56	22.57
23.90	20.68	83.42	23.08
35.00	20.75	92.79	23.85
45.58	20.98	100	24.69
55.68	21.38		

Jahn, 1891			
c	d	magn	
20°			
100	0.79476	84.90	
23.175	0.79219	86.15	
0	0.79009	84.77	

Smith and Smith, 1918			
%	χ	%	χ
20°			
0	-0.619	53.3	-0.676
14.8	-0.630	74.5	-0.692
30.9	-0.648	100	-0.721

Heat constants			
Nakamura, 1928			
mol %	U	mol %	U
0	0.424	50	0.438
10	0.431	90	0.471
25	0.477	100	0.507

Timofeev, 1905			
%	Q dil		
initial	final	(by mole alcohol)	
0	5.7	-1125	
5.7	11.2	- 935	
20.9	27.3	- 552	
44.4	47.7	- 239	

Hirobe, 1908			
mol %	Q mix	mol %	Q mix
25.12°			
100	-	53.999	-267.0
89.471	-106.1	44.169	-268.3
73.917	-210.1	34.042	-252.0
63.252	-251.0	17.098	-168.5
55.582	-266.8	0	-

Acetone (C_3H_6O) + Propyl alcohol (C_3H_8O)					
Tomonari, 1936					
%	d	n_D	%	d	n_D
20°					
0	0.7908	1.35916	60	0.7908	1.37562
20	.7939	.36472	80	.8017	.38100
40	.7963	.37026	100	.8041	.38644

Acetone (C_3H_6O) + Isopropyl alcohol (C_3H_8O)					
Parks and Chaffee, 1927					
mol%	p	P_1	P_2		
25°					
0.0	226.5	226.5	0.0		
16.1	221.6	199.7	21.9		
33.1	190.0	162.5	27.5		
48.6	167.2	134.2	33.0		
66.1	139.6	102.6	37.0		
82.5	100.0	59.9	40.1		
100.0	44.3	0.0	44.3		

mol%		mol%	
L	V	L	V
25°			
15.2	10.8	48.6	20.2
16.1	9.0	48.8	19.7
29.9	13.7	66.1	26.5
30.2	13.7	81.2	39.0
45.2	17.2	84.9	42.2

%	d	%	d
25°			
0.00	0.7855	49.72	0.7806
15.65	.7832	49.85	.7807
16.56	.7831	66.90	.7801
30.00	.7818	81.70	.7804
30.89	.7816	85.37	.7805
46.34	.7805	100.00	.7803

Thacker and Rowlinson, 1954 (fig.)			
mol%	Dv (cc/mol)	mol%	Dv (cc/mol)
10	0.12	70	0.23
30	.25	90	.08
50	.30		

Parks and Chaffee, 1927				Parks and Chaffee, 1927			
%	η	%	η	%	Q mix	%	Q mix
25°				20°			
0	308	49.72	507	15.65	-190	49.85	-385
15.65	347	49.85	513	16.56	-196	66.90	-343
16.56	349	66.90	703	30.00	-316	67.41	-357
30.00	339	81.70	1071	30.89	-320	67.61	-338
30.89	395	85.37	1187	46.34	-362	81.70	-236
46.34	486	100.00	2020	49.72	-388	85.37	-197
Thacker and Rowlinson, 1954 (fig.)				Thacker and Rowlinson, 1954 (fig.)			
mol%	$D\eta/\eta$			mol%	Q mix		
	56°	80°	100°				
15	-0.001	-	-	10	-150		
18	-	-	+0.005	30	-340		
20	-	+0.006	-	50	-410		
49	+0.006	0.016	0.013	70	-370		
67	-	-	0.000	90	-170		
77	-	0.002	-				
79	0.000	-	-				
$D\eta/\eta = \eta - x_1\eta_1 - x_2\eta_2$ where x_1 and x_2 are the mole fractions and η_1 and η_2 are the viscosities of the pure components at the same temperature.				Acetone (C_3H_6O) + Butyl alcohol ($C_4H_{10}O$)			
Palmer, 1920				Brunjes and Furnas, 1935.			
%	n		%	mol%		L	
	C	E					
21°							
0	1.35633	1.36296	15.1	1.35862	1.36526	100	100
1.38	.35655	.36324	16.2	.35871	.36534	75.6	96.8
1.95	.35651	.36316	29.3	.36097	.36768	41.8	89
2.41	.35660	.36324	53.8	.36537	-	23.5	79.5
3.5	.35701	.36358	67.3	.36779	.37443	14.8	70
5.07	.35714	.36378	72.3	.36940	.37592		
8.24	.35754	.36425	89.9	.37225	.37861		
9.71	.35772	.36436	100	.37470	.38121		
13.49	.35834	.36492					
Parks and Chaffee, 1927				Fordyce and Simonsen, 1949			
%	η_D		%	p		p	
				L	V	L	V
25°							
0.00	1.3555	49.72	1.3641	99.9	93.7	50	25.4
15.65	1.3578	49.85	1.3641	87.5	11.2	73	12.1
16.56	1.3579	66.90	1.3672	61.9	4.9	116	6.4
30.00	1.3604	81.70	1.3708	40.6	3.2	149	1.2
30.89	1.3605	85.37	1.3711				
46.34	1.3634	100.00	1.3743				

Ernst, Litkenhous and Spanyer, 1932			
mol%	b.t.	mol%	b.t.
760 mm			
100	117.69	34.3	66.34
87.6	101.35	25.1	63.32
75.8	88.49	16.4	60.90
64.6	80.00	8	58.68
54	74.21	0	56.24
43.9	70.03		

Reilly and Ralph, 1920			
%	d		
20°			
0	0.79123		
29.53	.79637		
50	.79976		
69.14	.80360		
100	.80974		

Ernst, Litkenhous and Spanyer jr., 1932			
mol%	d	mol%	d
25°			
100	0.8056	34.3	0.7929
87.6	.8031	25.1	.7908
75.8	.8012	16.4	.7889
64.6	.7991	8	.7870
54	.7970	0	.7856
43.9	.7940		

Tomonari, 1936			
%	d	%	d
20°			
0	0.7908	60	0.8033
20	.7953	80	.8076
40	.7993	100	.8118

Brunjes and Furnas, 1935			
wt%	mol%	d	
25°			
100	100	0.805301	
95.04	94.80	.80428	
90	87.60	.80216	
80.25	76	.80012	
70.40	65	.79826	
60.25	54.30	.79581	
		.79334	
		.79133	
		.78951	
		.78716	
		.78423	
		.78233	

Ernst, Litkenhous and Spanyer Jr., 1932					
mol %	η	mol %	η	mol %	η
25°					
100	2485.0	54	710.8	16.4	401.4
87.6	1650.0	43.9	591.9	8	365.1
75.8	1164.0	34.3	508.9	0	343.9
64.6	887.5	25.1	428.5		

Ernst, Litkenhous and Spanyer Jr., 1932					
mol %	σ	mol %	σ	mol %	σ
25°					
100	24.20	54	24.04	16.4	23.80
87.6	24.14	43.9	23.98	8	23.74
75.8	24.17	34.3	23.92	0	22.99
64.6	24.10	25.1	23.86		

Ernst, Litkenhous and Spanyer Jr., 1932			
mol %	n_D	mol %	n_D
25°			
100	1.3981	34.3	1.3727
87.6	1.3934	25.1	1.3686
75.8	1.3891	16.4	1.3645
64.6	1.3850	8	1.3607
54	1.3808	0	1.3570
43.9	1.3770		

Brunjes and Furnas, 1935					
wt %	mol %	n_D	wt %	mol %	n_D
25°					
100	100	1.3985	50.60	44.60	1.3790
95.04	94.80	.3965	40.52	35	.3743
90	87.60	.3946	30.49	25.60	.3700
80.25	76	.3903	20.45	17.70	.3664
70.40	65	.3864	10.28	8.20	.3615
60.25	54.30	.3822	0	0	.3578

Tomonari, 1936			
%	n_D	%	n_D
20°			
0	1.35916	60	1.38337
20	.36728	80	.39159
40	.37544	100	.39964

Acetone (C ₃ H ₆ O) + Isobutyl alcohol (C ₄ H ₁₀ O)					
Osipov, Panina and Lempert, 1955					
mol %	η	χ	mol %	η	χ
20°					
0	300	21	80	1950	17.5
20	450	19	90	2800	18
40	700	17	100	4000	18.5
60	1100	17			

Acetone (C_3H_6O) + Amyl alcohol ($C_5H_{12}O$)

Carnazzi, 1905

%	d	%	d
20°			
0	0.7962	80.62	0.8075
6.35	.7976	94.48	.8085
12.39	.7988	100	.8088
48.36	.8044		

Carnazzi, 1905

%	15°	20°	25°	30°
$\tau \cdot 10^6$				
0	1323	1340	1355	1370
6.35	1304	1319	1332	1352
12.39	1287	1304	1315	1325
48.36	1191	1194	1207	1218
80.62	1032	1035	1037	1045
94.48	939	950	960	966
100	909	917	924	928

%	35°	40°	45°	50°
$\tau \cdot 10^6$				
0	1378	1398	1418	1440
6.35	1367	1376	1392	1413
12.39	1334	1352	1372	1395
48.36	1229	1239	1250	1264
80.62	1052	1063	1072	1082
94.48	972	976	991	999
100	936	942	950	961

P	π 25°						
	0%	4.5%	6.99%	49.07%	83.05%	95.19%	100%
50	133	120	103	97	93	90	87
200	123	108	101	93	89	83	82
400	116	97	93	86	83	78	77
600	109	89	84	78	74	72	71
800	102	80	76	71	68	67	66

Acetone (C_3H_6O) + Isoamyl alcohol ($C_5H_{12}O$)

Tomonari, 1936

%	d	n_D	%	d	n_D
20°					
0	0.7908	1.35916	60	0.8032	1.38788
20	.7952	.36877	80	.8076	.39797
40	.7988	.37804	100	.8119	.40774

Acetone (C_3H_6O) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
11.9	-20.0
76.6	0.0
100	+6.98

Acetone (C_3H_6O) + Lauryl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
1.6	-20.0
11.4	0.0
42.9	+10.0
92.0	20.0
100	23.95

Acetone (C_3H_6O) + Myristic alcohol ($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.	%	f.t.
0.1	-20.0	27.8	20.0
2.4	0.0	77.5	30.0
7.9	+10.0	100	38.26

Acetone (C_3H_6O) + Cetyl alcohol ($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.	%	f.t.
0.1	0.0	23.5	30.0
1.3	10.0	74.3	40.0
6.2	20.0	100	49.62

Acetone (C_3H_6O) + Octadecyl alcohol ($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.	%	f.t.
0.1	10.0	29.3	40.0
1.1	20.0	100	57.98
6.5	30.0		

Acetone (C ₃ H ₆ O) + Glycerol (C ₃ H ₈ O ₃) Mc Ewen, 1923			
%	sat.t.	%	sat.t.
10.39	40.0	51.57	95.5
13.07	53.5	53.69	95.3
23.04	81.3	54.25	95.3
32.58	91.7	55.33	95.3
35.53	93.5	65.26	85.3
42.75	95.5	70.76	81.3
43.41	95.5	73.42	81.3
44.66	95.6	79.56	86.6
46.93	95.7	84.23	44.8
48.72	95.6	89.10	9.5

Poppe, 1934			
C.S.T. sup. = 100.4°		dp = -0.0635	

Acetone (C ₃ H ₆ O) + Methyl malate I (C ₆ H ₁₀ O ₅) Walden, 1906			
%	D b.t.	%	D b.t.
2.86	+0.237	10.37	+1.128
4.51	.417	13.09	1.485
6.10	.604	16.98	2.025
8.04	.836		

%	d	(α) _D
20°		
16.98	0.849	-11.13
11.26	.832	-11.36
4.98	.809	-11.58
50°		
11.26	0.795	-11.25
4.98	.775	-10.61

g/100cc	(α)	c	(α)	c	(α)	c
18°						
red		green		violet		
4.40	-9.32	1	-14.32	1.54	-18.98	-2.04
8.80	-9.09	1	-13.86	1.53	-18.41	-2.02
17.60	-8.84	1	-13.61	1.54	-18.21	-2.06
c = dispersion coefficient.						

Grossmann and Landau, 1910						
g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.023	-6.90	-9.20	-10.00	-11.39	-12.59	-13.39
25.0115	-7.96	-9.84	-11.59	-13.87	-14.95	-
12.5058	-8.24	-10.64	-12.47	-15.35	-16.23	-
5.562	-9.21	-11.32	-13.99	-15.22	-17.17	-18.80
2.562	-10.93	-14.05	-15.22	-17.17	-18.74	-

Tomonari, 1936			
%	n _D	%	n _D
20°			
0	1.35916	60	1.38337
20	.36728	80	.39159
40	.37544	100	.39964

Acetone (C ₃ H ₆ O) + Ethyl malate (C ₈ H ₁₄ O ₅) Walden, 1906			
%	D b.t.		
4.31	+0.332		
8.05	0.730		
10.20	0.965		
12.88	1.284		
15.39	1.599		

Acetone (C ₃ H ₆ O) + Methyl tartrate (C ₆ H ₁₀ O ₆) Yen-ki-Heng, 1936			
t	d	t	d
22.540%			
1	0.9068	43	0.8661
12	.8962	51	.8583
21	.8874	60	.8506
32	.8768		

Lowry and Abrams, 1915					
w.l.	(α)		w.l.	(α)	
	0%	25gr/100cc		0%	25gr/100cc
20°					
6708	+2.79	+4.59	4144	-	-10.0
6438	2.65	4.67	4065	-	13.0
5893	2.22	4.62	4046	-	13.7
5780	2.05	4.50	3982	-	16.7
5461	1.28	4.01	3934	-22.48	18.0
5086	-0.39	2.73	3925	-	18.7
4800	2.47	0.97	3900	-	19.7
4384	-	-4.7	3847	-	22.7
4358	8.93	5.05	3825	-	24.0
4353	-	5.3	3788	-	26.7
4299	-	6.3	3750	-	29.3
4271	-	7.0			

Yen-ki-Heng, 1936

t	Hg _y	Hg _g	Hg _i
22.540%			
1	1.86	1.48	3.51
12	2.13	1.865	2.895
21	2.465	2.275	2.075
32	2.56	2.405	1.835
43	2.83	2.69	1.14
51	2.945	2.845	0.685
60	3.245	3.105	0.25

Acetone (C₂H₆O) + Ethyl tartrate (C₈H₁₄O₆)

Walden, 1906

%	D b.t.
3.67	+0.245
6.72	.534
9.30	.833
12.29	1.109
14.76	.378

%	t	d
15.54	0	0.872
14.76	20	.841
15.54	20	.850
15.54	50	.817

Patterson and Pollock, 1914

t	d	t	d
10.01%		25.055%	
13	0.8302	11.5	0.8820
17	.8260	16.2	.8769
36.7	.8043	25.5	.8665
46	.7944	32.0	.8593
		36	.8550

t	d	t	d
100°			
16.8	1.2087	46.8	1.1783
37.2	.1878	58.3	.1665

Patterson and Pollock, 1914

t	(α) _D
10.01 %	
13	11.67
17	11.86
36.7	13.35
46	13.92
25.055 %	
11.5	11.25
16.2	11.61
25.5	12.33
32.0	12.76
36	13.03

t	(α) _D
100°	
20.1	7.67
33.7	9.10
37.6	9.51
46.1	10.24
55.1	10.94

Walden, 1906

%	t	(α) _D
15.54	0	9.91
14.76	20	11.76
15.54	20	11.62
15.54	50	13.36

Lowry and Dickson, 1915

%	(α)
	6708 Å 5893 Å 5780 Å
5	10.73 12.80 13.23
10	10.10 12.28 12.63
20	9.90 11.66 11.93
100	6.69 7.45 7.52

%	(α)
	5461 Å 4358 Å
5	13.97 11.37
10	13.24 10.99
20	12.46 9.52
100	7.50 1.62

Acetone (C_3H_6O) + Cyclohexanol ($C_6H_{12}O$)

Weissenberger and Schuster, 1924

mol%	p	mol%	p
20°			
80	69	40.0	151
66.7	101	25.0	165
57.2	122	16.2	168
50.0	136		
mol%	η (water=1)	σ	
20°			
100	14.5	0.474	
80	4.2	.436	
66.7	2.3	.416	
57.2	1.6	.401	
50.0	1.3	.388	
40.0	0.82	.369	
25.0	0.68	.351	
16.2	0.61	.346	
0	0.37	.313	

Acetone (C_3H_6O) + Trichlorolactamide ($C_3H_4O_2NCl_3$)

Meldrum and Turner, 1908

gr/100cc	D b.t.	gr/100cc	D b.t.
12.65	+1.600	9.01	+1.150
11.23	1.440	8.22	1.045
10.03	1.280	7.50	0.935

Acetone (C_3H_6O) + Borneol ($C_{10}H_{18}O$)

Peacock, 1914

%	d	n_D	$(\alpha)_D$
25°			
1.0302	0.7860	1.3593	27.6
2.9805	.7925	.3613	26.3
3.0730	.7960	.3623	28.6
9.9940	.8035	.3675	28.7
15.322	.8113	.3739	27.0
19.652	.8184	.3791	27.1
37.697	.8493	.4005	27.2

Acetone (C_3H_6O) + Glycol mononitrate ($C_2H_5O_4N$)

Twist and Baughan, 1955

mol%	P_1	mol%	P_1
20°			
5.33	175.0	57.26	64.8
11.53	163.2	59.34	59.5
12.87	160.3	61.83	56.0
18.24	149.1	63.22	54.0
20.04	145.7	63.32	43.5
21.92	140.4	70.13	41.8
24.17	136.2	70.01	39.3
28.98	125.1	73.59	33.5
35.81	110.0	76.97	29.8
36.90	108.1	80.30	23.3
38.90	104.3	80.93	22.5
44.25	92.1	82.57	22.1
45.28	90.0	85.67	16.9
46.88	84.9	89.04	11.6
47.47	84.0	91.99	10.5
50.70	79.0	93.61	8.7
50.99	77.9	95.57	6.3
52.49	74.0	98.39	2.0
56.75	66.3		

mol%	d	Dv (cc/mole)
20°		
0	0.7905	-
19.15	.9107	-0.51
38.87	1.0308	-0.89
59.17	.1459	-0.83
80.16	.2558	-0.39
100	.3559	-

Methyl ethyl ketone (C_4H_8O) + Methyl alcohol (CH_4O)

Britton, Nutting and Horsley, 1952 (fig.)

L	%	V	b.t.
100 mm			
0	0		27
10	20		21.5
20	31		19.5
40	52		18
58	58		17.5
80	70		19
100	100		20
275 mm			
0	0		49
10	21		44
20	32		42
40	52		40
63	63		39
80	72		39.5
100	100		40.5

757 mm		
0	0	80
10	24	71
20	40	67
40	61	65
68	68	64
80	78	64
100	100	65
2040 mm		
0	0	148
10	24	135
20	39	129
40	62	123
60	80	120.5
80	90	120
100	100	120
11090 mm		
0	0	197
10	30	175
20	43	167
40	62	159
60	79	155
80	90	153.5
100	100	153

Hill and van Winkle, 1952				
b.t.	wt%		mol%	
	V	L	V	L
67.0	20.3	8.5	28.4	10.6
66.2	28.1	14.7	39.2	20.0
65.5	31.0	17.7	53.0	36.0
64.8	42.9	31.1	61.6	49.1
61.9	45.2	34.6	68.2	60.0
63.5	53.9	47.7	73.6	69.2
63.0	63.2	61.4	78.6	77.1
63.6	71.2	71.7	84.0	84.0
62.7	73.1	73.9	89.1	90.0
63.7	81.3	83.2	94.4	95.3

Methyl ethyl ketone ($\text{C}_4\text{H}_8\text{O}$) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)				
Hellwig and van Winkle, 1953				
b.t.	wt%		mol%	
	V	L	V	L
78.4	100	100	100	100
77.2	93.5	95.6	89.8	93.3
75.2	74.3	80.8	64.9	72.9
74.6	64.2	69.5	53.4	59.3
74.0	51.3	52.1	40.2	41.0
74.1	49.2	48.5	38.3	37.6
75.0	27.9	22.3	19.8	15.5
75.6	20.8	15.1	14.4	10.2
77.7	8.64	4.00	5.70	2.60
79.2	0	0	0	0
Az:	50.1 mol%		74.0°	

Marshall, 1906									
Az:		75° (763 mm)							
Methyl ethyl ketone ($\text{C}_4\text{H}_8\text{O}$) (b.t.=79.6) + Alcohols.									
Lecat, 1949									
2 nd comp.			Az						
Name	Formula	b.t.	%	b.t.	Dt mix				
Methyl alcohol	(CH_4O)	64.65	30	63.5	-				
Ethyl alcohol	($\text{C}_2\text{H}_6\text{O}$)	78.32	46	75.7	-5.5 (50%)				
Isopropyl alcohol	($\text{C}_3\text{H}_8\text{O}$)	82.4	32	77.9	-5.9				
Tert. Butyl alcohol	($\text{C}_4\text{H}_{10}\text{O}$)	82.45	31	78.7	-				
Methyl ethyl ketone ($\text{C}_4\text{H}_8\text{O}$) + sec. Butyl alcohol ($\text{C}_4\text{H}_{10}\text{O}$)									
Amick, Weiss and Kirshenbaum, 1951									
mol%		b.t.							
L	V								
760.0 mm									
98.2	96	99.0							
94.4	89	97.5							
88.6	78.3	96.0							
88.2	78	96.0							
87.2	76.8	95.8							
84.0	70.4	94.8							
83.6	70.9	94.2							
78.2	63	93.6							
75.5	59.7	92.5							
72.4	55.6	91.4							
72.3	55.2	91.7							
70.9	54.4	91.3							
63.7	46	90.2							
60.5	43.6	83.8							
57.5	40.5	88.3							
47.9	32.6	86.7							
46.9	31.3	87.1							
39.0	25.6	85.2							
34.6	23.1	84.3							
32.4	21.4	84.4							
28.3	18.8	83.2							
19.1	12.9	82.1							
12.2	8	81.5							
10.8	7.4	80.9							
7.3	5.1	80.7							
6.9	4.6	80.3							
6.0	4	80.2							
2.9	2	79.9							

METHYL ETHYL KETONE + DECYL ALCOHOL

mol %		b. t.
L	V	
374.5 mm		
96.6	91.2	80.3
92.7	82.4	79.0
90.5	77.6	78.1
85.5	67.8	76.4
82.8	63.5	75.2
77.9	57.2	73.9
74.2	52.9	72.3
68.3	45.4	71.0
63.2	40.4	69.4
52.1	30.2	67.2
48.4	28.1	66.5
45.2	25.4	65.8
42.0	23.5	65.4
32.8	18.3	63.7
28.4	15.7	63.0
19.1	10.6	61.8
11.4	6.4	60.6
3.5	2.0	59.9

Methyl ethyl ketone (C ₄ H ₈ O) + 1-Decyl alcohol (C ₁₀ H ₂₂ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
14.1	-20.0
77.8	0.0
100	+6.88

Methyl ethyl ketone (C ₄ H ₈ O) + Lauryl alcohol (C ₁₂ H ₂₆ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
3.5	-20.0
16.2	0.0
46.8	+10.0
92.0	20.0
100	23.95

Methyl ethyl ketone (C ₄ H ₈ O) + Myristic alcohol (C ₁₄ H ₃₀ O)			
Hoerr, Harwood and Ralston, 1944			
%	f. t.	%	f. t.
0.6	-20.0	37.5	20.0
4.4	0.0	77.5	30.0
14.1	+10.0	100	38.26

Methyl ethyl ketone (C ₄ H ₈ O) + Cetyl alcohol (C ₁₆ H ₃₄ O)			
Hoerr, Harwood and Ralston, 1944			
%	f. t.	%	f. t.
1.6	0.0	33.3	30.0
4.5	10.0	74.3	40.0
12.4	20.0	100	49.62

Methyl ethyl ketone (C ₄ H ₈ O) + Octadecyl alcohol (C ₁₈ H ₃₈ O)			
Hoerr, Harwood and Ralston, 1944			
%	f. t.	%	f. t.
0.1	0.0	11.2	30.0
1.0	10.0	38.2	40.0
3.7	20.0	100	57.98

Methyl ethyl ketone (C ₄ H ₈ O) + Glycerol (C ₃ H ₈ O ₃)			
Mc Ewen, 1923			
%	sat. t.	%	sat. t.
7.86	55.5	58.73	163.2
13.45	118.5	63.87	162.5
25.22	150.0	73.25	155.5
32.86	161.5	86.79	128.5
39.75	164.5	89.27	116.5
46.16	164.5	96.00	97.5
C.S.T.			

Methyl propyl ketone (C ₅ H ₁₀ O) + Methyl alcohol (CH ₄ O)				
Hill and van Winkle, 1952				
wt%		mol%		b. t.
V	L	V	L	
27.4	7.1	42.1	12.4	77.9
41.3	14.8	57.6	23.0	73.5
49.8	22.4	70.5	40.2	72.2
56.4	30.1	77.0	53.5	69.0
63.3	40.7	81.9	64.2	67.3
72.5	55.4	85.9	72.9	66.1
79.9	67.7	89.1	80.2	64.6
88.9	83.2	92.0	85.6	63.3
94.3	91.9	94.7	91.5	63.9

Methyl ethyl ketone (C_4H_8O) + Cetyl alcohol
($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
1.6	0.0	33.3	30.0
4.5	10.0	74.3	40.0
12.4	20.0	100	49.62

Methyl ethyl ketone (C_4H_8O) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
0.1	0.0	11.2	30.0
1.0	10.0	33.2	40.0
3.7	20.0	100	57.98

Methyl ethyl ketone (C_4H_8O) + Glycerol ($C_3H_8O_3$)

Mc Ewen, 1923

%	sat. t.	%	sat. t.
7.86	55.5	58.73	163.2
13.45	118.5	63.87	162.5
25.22	150.0	73.25	155.5
32.86	161.5	86.79	128.5
39.75	164.5	89.27	116.5
46.16	164.5	96.00	97.5

Methyl propyl ketone ($C_5H_{10}O$) + Methyl alcohol
(CH_4O)

Hill and van Winkle, 1952

wt%		mol%		b. t.
V	L	V	L	
27.4	7.1	42.1	12.4	77.9
41.3	14.8	57.6	23.0	73.5
49.8	22.4	70.5	40.2	72.2
56.4	30.1	77.0	53.5	69.0
63.3	40.7	81.9	64.2	67.3
72.5	55.4	85.9	72.9	66.1
79.9	67.7	89.1	80.2	64.6
88.9	83.2	92.0	85.6	63.3
94.3	91.9	94.7	91.5	63.9

Methyl propyl ketone (C ₅ H ₁₀ O) + Ethyl alcohol (C ₂ H ₆ O)				
Lecat, 1949				
%	b. t.			
0	102			
88.7	77.7 Az			
100	78.3			
Britton, Nutting and Horsley, 1952 (fig.)				
L	%	V	b. t.	
100 mm				
0	0	46		
10	20	40		
20	26	38		
40	60	35		
64	64	34		
80	80	34		
100	100	35		
747 mm				
0	0	100		
10	31	90		
20	48	85		
40	68	80		
60	82	79		
80	84	78.5		
100	100	78		
5400 mm				
0	0	183		
10	26	165		
20	42	155		
40	66	148		
60	82	144		
80	94	141		
100	100	100		
Hellwig and van Winkle, 1953				
b. t.	mol%		wt%	
	V	L	V	L
78.4	100	100	100	100
78.3	98.3	98.5	96.8	97.2
77.9	96.7	96.9	94.0	94.3
78.0	95.3	95.9	91.5	90.8
78.3	93.0	91.9	87.7	85.8
78.5	89.2	86.7	81.6	77.7
78.5	88.5	85.4	80.4	75.8
78.7	83.8	78.9	73.4	66.6
79.8	73.8	62.4	60.1	47.0
73.8	73.2	61.3	59.3	45.9
81.8	68.3	53.4	53.5	38.0
82.9	51.8	30.1	36.5	18.7
86.0	34.7	13.0	22.1	7.4
87.9	23.7	6.52	14.3	3.6
Az:	96.2 mol%		78.0°	

Methyl propyl ketone (C ₅ H ₁₀ O) (b. t.=102.35) + Alcohols.					
Lecat, 1949					
2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Propyl alcohol	(C ₃ H ₈ O)	97.2	68	96.0	-4.3 (70%)
Isobutyl alcohol	(C ₄ H ₁₀ O)	108.0	19	101.8	-4.5 (50%)
Tert. Amyl alcohol	(C ₅ H ₁₂ O)	102.35	42	100.9	-
Allyl alcohol	(C ₃ H ₆ O)	96.85	70	95.0	-
Methyl propyl ketone (C ₅ H ₁₀ O) + Isopropyl alcohol (C ₃ H ₈ O)					
Ballard and van Winkle, 1953					
b. t.	mol%		b. t.	mol%	
	V	L		V	L
98.0	20.30	7.55	85.4	72.00	58.45
94.8	32.95	14.55	84.3	78.00	68.50
91.4	46.10	24.60	83.5	84.15	78.15
88.6	58.00	37.20	83.0	89.75	86.55
86.6	66.40	48.40	82.5	96.70	95.65
Methyl isopropyl ketone (C ₅ H ₁₀ O) + Propyl alcohol (C ₃ H ₈ O)					
Lecat, 1949					
%	b. t.		Dt mix.		
0	95.4		-		
35	93.5		-4.7		
100	97.2		-		
Methyl isopropyl ketone (C ₅ H ₁₀ O) + Allyl alcohol (C ₃ H ₆ O)					
Lecat, 1949					
%	b. t.		Dt mix.		
0	95.4		-		
30	-		-3.0		
36	93.5 Az		-		
100	96.85		-		

Methyl butyl ketone (C ₆ H ₁₂ O) + Methoxy glycol (C ₃ H ₈ O ₂)					
Lecat, 1949					
%		b. t.			
0		127.2			
56		121.5			
100		124.5			
Methyl butyl ketone (C ₆ H ₁₂ O) + Ethylenechlorhydrin (C ₂ H ₅ OCl)					
Lecat, 1949					
%		b. t.		Dt mix.	
0		127.2		-	
70		-		+0.2	
75		129.0		Az	
100		128.6		-	
Methyl isobutyl ketone (C ₆ H ₁₂ O) + Methyl alcohol (CH ₄ O)					
Hill and van Winkle, 1952					
wt%		mol%		b. t.	
V	L	V	L		
35.7	4.8	64.7	14.1	86.9	
51.6	11.6	75.1	25.8	77.0	
62.5	21.0	83.4	43.9	71.4	
65.3	25.8	87.2	57.3	70.5	
72.1	37.0	89.6	67.6	69.4	
73.6	41.1	81.5	75.8	67.8	
74.3	41.6	93.3	82.4	67.5	
79.9	55.4	95.0	88.0	65.7	
85.8	69.7	96.6	92.6	64.8	
90.8	81.0	98.3	96.6	63.3	
Methyl isobutyl ketone (C ₆ H ₁₂ O) + Isopropyl alcohol (C ₃ H ₈ O)					
Bullard and van Winkle, 1953					
b. t.		mol%		b. t.	
		V	L	V	L
112.0	14.30	3.45	89.5	75.10	49.70
108.5	25.20	6.55	87.4	80.35	60.70
103.0	40.75	14.30	86.0	84.90	70.45
97.0	56.10	25.35	84.4	90.55	83.15
92.3	67.85	39.30	83.0	96.25	93.15
91.9	69.25	41.45			

Methyl isobutyl ketone (C ₆ H ₁₂ O) (b. t. = 116.05) + Alcohols.					
Lecat, 1949					
		2 nd comp.		Az	
Name	Formula	b. t.	%	b. t.	Dt mix.
Butyl alcohol	(C ₄ H ₁₀ O)	117.8	30	114.35	-3.7 (53%)
Isobutyl alcohol	(C ₄ H ₁₀ O)	108.0	91	107.85	-1.1
Diethyl carbinol	(C ₅ H ₁₂ O)	116.0	35	115.0	-
Methoxy glycol	(C ₃ H ₈ O ₂)	124.5	25	114.2	-
Pinacolin (C ₆ H ₁₂ O) + Ethyl alcohol (C ₂ H ₆ O)					
Pestemer, 1934					
m		e		m	
				e	
8.11		10.80		5.50	
7.87		10.25		4.93	
7.42		9.40		3.85	
6.84		8.32		2.81	
6.17		7.67		1.54	
5.89		7.30		2.50	
m = molarity of pinacolin					
e = extinction coefficient in ultraviolet					
Pinacolin (C ₆ H ₁₂ O) + Isobutyl alcohol (C ₄ H ₁₀ O)					
Lecat, 1949					
%		b. t.			
0		106.2			
42		105.5			
45		-			
100		108.0			
Pinacolin (C ₆ H ₁₂ O) + Sec. Butyl alcohol (C ₄ H ₁₀ O)					
Lecat, 1949					
%		b. t.			
0		106.2			
84		99.1			
100		99.5			

Methyl hexyl ketone ($C_8H_{16}O$) (b.t.=172.85) +

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix or sat. t.
Pinacol	$C_6H_{14}O_2$	174.35	35	171.5	-
Glycol	$C_2H_6O_2$	197.4	20	168.0	66
Propylen- glycol	$C_3H_8O_2$	187.8	-	169.5	-
Propyl- lactate	$C_6H_{12}O_5$	171.7	75	171.4	-
1,3-Dichlor- 2-propanol	$C_3H_5OCl_2$	175.8	67	179.0	3.0 (50%)
1,2-Dichlor- 3-propanol	$C_3H_5OCl_2$	182.5	-	184.0	-

Methyl heptyl ketone ($C_9H_{18}O$) + Methyl alcohol
(CH_3O)

Hoerr, Reck and al., 1955

%	f.t.
89.2	-40.0
80.7	-30.0
49.3	-20.0
5.2	-10.0
0	- 7.46

Methyl heptyl ketone ($C_9H_{18}O$) + 2-Propyl alcohol
(C_3H_8O)

Hoerr, Reck and al., 1955

%		f. t.
stable	unstable	
: 99.5	99	-40.0
92.0	88.3	-30.0
61.0	56.2	-20.0
9.1	-	-10.0
0.	-	- 7.46

Methyl undecyl ketone ($C_{13}H_{26}O$) + Methyl alcohol
(CH_3O)

Hoerr, Reck and al., 1955

% stable unstable f. t.		
98.6	-	-10.0
94.9	93.5	0.0
82.3	78.8	+10.0
22.0	-	20.0
0	-	27.46

Methyl undecyl ketone ($C_{13}H_{26}O$) + Isopropyl alco-
hol (C_3H_8O)

Hoerr, Reck and al., 1955

% stable unstable f. t.		
97.9	97.0	-10.0
92.7	91.3	0.0
76.3	71.4	+10.0
27.4	-	20.0
0	-	27.46

Methyl heptadecyl ketone ($C_{19}H_{38}O$) + Methyl al-
cohol (CH_3O)

Hoerr, Reck and al., 1955

% stable unstable		f. t.
95.9	85.9	40.0
17.9	-	50.0
0	-	54.59

Methyl heptadecyl ketone ($C_{19}H_{38}O$) + Isopropyl
alcohol (C_3H_8O)

Hoerr, Reck and al., 1955

% stable unstable		f. t.
98.5	97.6	20.0
94.4	92.1	30.0
75.0	66.2	40.0
14.0	-	50.0
0	-	54.59

Diethylketone (C ₅ H ₁₀ O) (b.t.=102.05) + Alcohols. Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix.
Propyl alcohol	(C ₃ H ₈ O)	97.2	50 63	- 96.0	-5.2
Isobutyl alcohol	(C ₄ H ₁₀ O)	108.0	20 50	101.7 -	-5.7
Sec. Butyl alcohol	(C ₄ H ₁₀ O)	99.5	50 58	- 98.0	-5.5
Tert. Amyl alcohol	(C ₅ H ₁₂ O)	102.35	40	100.7	-
Allyl alcohol	(C ₃ H ₆ O)	96.85	72 80	95.95	-2.8
Ethyl propyl ketone (C ₆ H ₁₂ O) + Butyl alcohol (C ₄ H ₁₀ O) Lecat, 1949					
%	b. t.	Dt mix.			
0	123.3	-			
80	117.2 Az	-2.8			
100	117.8	-			
Ethyl propyl ketone (C ₆ H ₁₂ O) + Methoxy glycol (C ₃ H ₈ O ₂) Lecat, 1949					
%	b. t.				
0	123.3				
43	119.5 Az				
100	124.5				
Dipropylketone (C ₇ H ₁₄ O) + Methyl lactate (C ₄ H ₈ O ₃) Lecat, 1949					
%	b. t.				
0	143.55				
47	142.7 Az				
100	143.8				

Diisopropyl ketone (C ₇ H ₁₄ O) + Diisopropyl carbinol (C ₇ H ₁₆ O) George, 1943					
%	n _D	%	n _D		
20°					
0	1.4002	64.8	1.4157		
34.8	.4080	100	.4245		
53.2	.4127				
Diisobutyl ketone (C ₉ H ₁₈ O) (b.t.=168.0) + Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix.
Glycol	(C ₂ H ₆ O ₂)	197.4	15	164.2	-
Methyl-cyclo-hexanol	(C ₇ H ₁₄ O)	168.5	40	167.5	-2.0 (10%)
Dichlor 1.3. propanol	(C ₃ H ₆ OCl ₂)	175.8	85	177.5	-
Caprinone (C ₁₉ H ₃₈ O) + Methyl alcohol (CH ₄ O) Garland, Hoerr and al., 1943					
%	f. t.				
99.4	10.0				
98.5	30.0				
33.3	50.0				
0	57.8				
Caprinone (C ₁₉ H ₃₈ O) + Ethyl alcohol (C ₂ H ₆ O) Garland, Hoerr and al., 1943					
%	f. t.				
98.8	10.0				
96.9	30.0				
34.1	50.0				
0	57.8				

Caprinone ($C_{19}H_{38}O$) + Isopropyl alcohol (C_3H_8O)

Garland, Hoerr and al., 1943

%	f. t.
98.7	10.0
95.4	30.0
33.6	57.8

Caprinone ($C_{19}H_{38}O$) + Butyl alcohol ($C_4H_{10}O$)

Garland, Hoerr and al., 1943

%	f. t.
97.8	10.0
92.2	30.0
31.5	50.0
0	57.8

Laurone ($C_{23}H_{46}O$) + Methyl alcohol (CH_3O)

Garland, Hoerr and al., 1943

%	f. t.
99.9	10.0
99.5	30.0
98.3	50.0
18.7	64.7
0	69.3

Laurone ($C_{23}H_{46}O$) + Ethyl alcohol (C_2H_6O)

Garland, Hoerr and al., 1943

%	f. t.
99.8	10.0
99.4	30.0
94.3	50.0
10	65.0
0	69.3

Laurone ($C_{23}H_{46}O$) + Isopropyl alcohol (C_3H_8O)

Garland, Hoerr and al., 1943

%	f. t.
99.7	10.0
99.2	30.0
90.7	50.0
12.2	65.0
0	69.3

Laurone ($C_{23}H_{46}O$) + Butyl alcohol ($C_4H_{10}O$)

Garland, Hoerr and al., 1943

%	f. t.
99.6	10.0
98.8	30.0
86.1	50.0
12.2	65.0
0	69.3

Myristone ($C_{27}H_{54}O$) + Ethyl alcohol (C_2H_6O)

Garland, Hoerr and al., 1943

%	f. t.
99.9	30.0
99.2	50.0
88.1	65.0
0	77.2

Myristone ($C_{27}H_{54}O$) + Isopropyl alcohol (C_3H_8O)

Garland, Hoerr and al., 1943

%	f. t.
99.9	30.0
98.1	50.0
79.9	65.0
0	77.2

Myristone ($C_{27}H_{54}O$) + Butyl alcohol ($C_4H_{10}O$)

Garland, Hoerr and al., 1943

%	f. t.
99.9	30.0
95.9	50.0
70.0	65.0
0	77.2

Palmitone ($C_{31}H_{62}O$) + Ethyl alcohol (C_2H_6O)

Garland, Hoerr and al., 1943

%	f. t.
99.8	50.0
97.3	65.0
59.1	78.5
0	83.7

Palmitone ($C_{31}H_{62}O$) + Isopropyl alcohol (C_3H_8O)

Garland, Hoerr and al., 1943

%	f. t.
99.9	50.0
95.2	65.0
3.9	82.3
0	83.7

Palmitone ($C_{31}H_{62}O$) + Butyl alcohol ($C_4H_{10}O$)

Garland, Hoerr and al., 1943

%	f. t.
99.9	30.0
99.1	50.0
90.3	65.0
11.4	80.0
0	83.7

Stearone ($C_{35}H_{70}O$) + Isopropyl alcohol (C_3H_8O)

Garland, Hoerr and al., 1943

%	f. t.
99.4	65.0
63.3	82.3
0	88.7

Stearone ($C_{35}H_{70}O$) + Butyl alcohol ($C_4H_{10}O$)

Garland, Hoerr and al., 1943

%	f. t.
99.9	50.0
98.2	65.0
48.6	80.0
0	88.7

Methyl heptenone ($C_8H_{14}O$) (b. t. = 173.2) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or sat. t.
1,3-Dichlor-2-propanol	$C_3Cl_2H_6O$	173.2	65	179.0	+2.8 (40%)
Pinacol	$C_6H_{14}O_2$	174.35	40	171.7	-
Glycol	$C_2H_6O_2$	197.4	23	168.1	65
α -Dichlorhydrin	$C_3H_6OCl_2$	175.1	65	178.5	-

Isopropylidene acetone (C ₆ H ₁₀ O) (b.t.=129.45) +Alc Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix.
Methoxy- glycol	(C ₃ H ₈ O ₂)	124.5	60	122.5	-
Ethoxy- glycol	(C ₄ H ₁₀ O ₂)	135.3	18	128.9	-
Ethylene chlorhydrin	(C ₂ H ₅ OC1)	128.6	33	130.2	+0.1 (60%)
Isoamyl alcohol	(C ₅ H ₁₂ O)	131.9	24	129.15	-4.4 (50%)
Phorone (C ₉ H ₁₄ O) (b.t.=197.8) + Alcohols. Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b.t.	%	b.t.	
Octyl alcohol	(C ₈ H ₁₈ O)	195.2	80	193.5	
Glycol	(C ₂ H ₆ O ₂)	197.4	50	184.5	
Methoxy- diglycol	(C ₅ H ₁₂ O ₃)	192.95	75	190.5	
Acetyl acetone (C ₅ H ₈ O ₂) + Isoamyl alcohol (C ₅ H ₁₂ O) Lecat, 1949					
		% b.t.			
		0	137.7		
		65	129.5 Az		
		100	131.9		
Diacetyl (C ₄ H ₆ O ₂) (b.t.= 87.5) + Alcohols. Lecat, 1949					
2 nd comp.			Az		
Name	Formula	b.t.	%	b.t.	
Methyl alcohol	(CH ₄ O)	64.65	75	62.0	
Ethyl alcohol	(C ₂ H ₆ O)	78.3	47	73.9	
Propyl alcohol	(C ₃ H ₈ O)	97.2	25	85.0	
Isopropyl alcohol	(C ₃ H ₈ O)	82.4	60	79.0	

Acetyl acetone (C ₅ H ₈ O ₂) + Cyclopentanol (C ₅ H ₁₀ O) Lecat, 1949					
		% b.t.			
		0	137.7		
		32	135.5		
		100	140.85		
Acetonyl acetone (C ₆ H ₁₀ O ₂)(b.t.=191.3) + Alcohols Lecat, 1949					
2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	
Octyl alcohol	C ₈ H ₁₈ O	195.2	35	190.0	
sec. Octyl alcohol	C ₈ H ₁₈ O	180.4	82	179.0	
Glycol	C ₂ H ₆ O ₂	197.4	45	180.5	
Monochloracetone (C ₃ H ₅ OC1)(b.t.=119.7) + Alcohols Lecat, 1949					
2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	C ₄ H ₁₀ O	117.8	43	112.5	-6.5 (50%)
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	63	106.0	-6.8 (63%)
2-Pentanol	C ₅ H ₁₂ O	119.8	32	116.0	-
Isoamyl alcohol	C ₅ H ₁₂ O	131.9	17	119.0	-6 (50%)

Cyclopentanone (C_5H_8O) (b.t.= 130.65) + Alcohols
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Isoamyl alcohol	($C_5H_{12}O$)	131.9	42	130.0
Ethoxy glycol	($C_4H_{10}O_2$)	135.3	27	130.2

Cyclohexanone ($C_6H_{10}O$) + Ethyl alcohol (C_2H_6O)

Weissenberger, Schuster and Mayer, 1924

mol%	ρ
18°	
20	18
33.7	23
50	28
66.7	33

mol%	η (water=1)	σ
18°		
0	2.1	0.440
33.3	1.6	.402
42.3	1.6	.385
50.0	1.7	.373
66.7	1.4	.344
80.0	1.4	.337

Cyclohexanone ($C_6H_{10}O$) + Hexyl alcohol ($C_6H_{14}O$)

Lecat, 1949

%	b. t.	Dt mix.
0	155.7	-
6	155.65 Az	-
10	-	-2.0
100	157.85	-

Cyclohexanone ($C_6H_{10}O$) + Ethyl lactate ($C_5H_{10}O_3$)

Lecat, 1949

%	b. t.	Dt mix.
0	155.7	-
60	-	-1.2
66	153.7 Az	-
100	154.9	-

Cyclohexanone ($C_6H_{10}O$) + Cyclohexanol ($C_6H_{12}O$)

Hudlicky, 1949

%	η	n_D	%	η	n_D
25°					
0	1850	1.4482	60.5	6290	-
20	2380	.4510	66.5	7360	1.4588
33.4	3020	.4532	80	13850	.4608
40	3540	-	100	46000	.4646
50	4540	.4559			

Menthone ($C_{10}H_{18}O$) (b.t.=209.5) + Glycols.
Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Glycol	($C_2H_6O_2$)	197.4	62	190.0
Propylen glycol	($C_3H_8O_2$)	187.8	85	185.0

Menthone ($C_{10}H_{18}O$) + Menthol ($C_{10}H_{20}O$)

Vanstone, 1909

mol%	f. t.	mol%	f. t.
0.0	-6.6	49.2	+2.0
10.2	-9.1	56.2	8.0
25.5	-12.0	63.0	12.0
39.6	-5.0	100	39.0

Camphor (C ₁₀ H ₁₆ O) + Methyl alcohol (CH ₃ O)			
Vandenberghe, 1899			
%	D b. t.	%	D b. t.
+2.91	+0.175	13.79	+0.773
4.76	.257	14.53	.820
6.54	.335	16.67	.905
6.54	.370	17.35	1.59
9.91	.537	18.03	1.023
10.71	.600		
Landolt, 1876 and 1877			
%	d		
20°			
50.6134	0.88093		
69.6846	.85318		
88.7410	.82700		
100	.80915		
Kanonnikov, 1885			
%	d		
20°			
70.67	0.83607		
100	.79177		
Zoppellari, 1905			
%	d	%	d
93.9867	0.80915	68.7922	0.85105
84.5868	.82535	57.3361	.86858
71.5525	.84491		
Golse, 1911			
%	d	%	d
20°			
100	0.7912	64.54	0.8472
87.66	.8102	53.74	.8649
75.86	.8286	43.34	.8827

Malosse, 1912			
%	d	%	d
20°			
100	0.8123	70	0.8580
90	.8276	60	.8731
80	.8425	50	.8883
Zoppellari, 1905			
%	t	n _D	
93.9868	10.6	1.33945	
84.5868	9.6	.35163	
71.5525	10.5	.36756	
68.7922	9.2	.37192	
57.3361	10.1	.38652	
Kanonnikov, 1885			
%	H _α	n _D	H _β
70.67	1.38806	1.39009	1.39471
100	.35930	.36067	.36543
Golse, 1911			
%	n _D	%	n _D
20°			
100	1.3290	64.54	1.3723
87.66	.3435	53.74	.3876
75.86	.3576	43.34	.4026
Landolt, 1876 and 1877			
%	(α) _D		
20°			
88.7410	45.844		
69.6846	47.179		
50.6134	48.996		
Angla, 1949			
c	(α) ₅₄₆₀	c	(α) ₅₄₆₀
1	47°00	10	51°00
2	48°00	20	52°95
3	49°20	30	55°00
5	49°00		

Camphor ($C_{10}H_{16}O$) + Ethyl alcohol (C_2H_6O)

Carroll, Rollefson and Mathews, 1925

wt%	mol%	f. t.
49.0	24.0	0
35.60	35.3	25.0
24.30	48.5	52.9

Ohlm, 1913

N	diffusion ratio	cm ² /day
20°		
2	0.54	
1	.58	
0.5	.60	

Landolt, 1877

%	d	%	d
20°			
100	0.7957	69.8380	0.84031
90.3117	.80943	50.1858	.87194
84.9080	.81752	45.2719	.88021

Golse, 1911

%	d	%	d
20°			
100	0.7939	64.43	0.8478
87.68	.8129	53.75	.8649
75.90	.8304	43.21	.8822

Malosse, 1912

%	d	%	d
20°			
100	0.7930	70	0.8438
90	.8106	60	.8615
80	.8264	50	.8782

Watterfors, 1920

%	d	%	d
18°			
87.86	0.8114	53.78	0.8658
75.88	0.8296	43.34	0.8835
64.61	0.8479		

Wetselaar, 1927

%	d	%	d
15°			
100	0.7940	85	0.8169
95	0.8016	80	0.8245
90	0.8093		

Owen, 1930

%	d	%	d
20°			
100	0.7916	69.897	0.8377
94.022	0.8005	61.720	0.8509
89.487	0.8075	52.107	0.8667
84.341	0.8150	49.507	0.8717
75.623	0.8283		

Castiglioni, 1933

%	d	%	d
20°			
100	0.8142	60	0.8661
90	0.8220	50	0.8795
80	0.8363	40	0.8925
70	0.8515		

Pariaud, 1951 (fig.)

mol %	d	mol %	d
23°			
0	0.899	90.9	0.839
71.4	0.889	95.2	0.821
77.7	0.886	96.5	0.814
83.3	0.864		

Ohlm, 1913

%	n
20°	
2	1508
1	1362
0.5	1295
0.15	1236
0	1216

Castiglioni, 1933				
%	η	%	η	
20°				
100	1500.5	60	1936.1	
90	1552.0	50	2118.5	
80	1565.2	40	2435.3	
70	1685.8			
Wetselaar, 1927				
%	n_D	%	n_D	
15°				
100	1.3623	85	1.3764	
95	.3670	80	.3811	
90	.3717			
Golse, 1911				
%	n_D	%	n_D	
20°				
100	1.3618	64.43	1.3961	
87.68	.3735	53.75	.4076	
75.90	.3846	43.21	.4191	
Wetterfors, 1920				
%	n	(α)	n	(α)
7100 Å		5890 Å		
87.86	1.3709	25.25	1.3738	43.25
75.88	.3823	25.86	.3853	44.37
64.61	.3934	26.47	.3967	45.45
53.78	.4047	27.05	.4081	46.53
43.34	.4161	27.76	.4195	47.67
5460 Å		4360 Å		
87.86	1.3754	55.51	1.3818	131.39
75.88	.3870	56.81	.3936	134.27
64.61	.3983	58.18	.4053	137.26
53.78	.4099	59.49	.4171	140.22
43.34	.4214	60.84	.4289	143.34
Landolt, 1877				
%	(α) _D	%	(α) _D	
20.6°				
100	-	69.8380	44.901	
90.3117	42.806	50.1858	46.934	
84.9080	43.661	45.2719	47.823	

Owen, 1930			
%	(α) _D	dispersion coefficient	
20°			
94.022	43.22	0.0920	
89.487	43.32	.0920	
84.341	43.53	.0920	
75.623	44.46	.0930	
69.897	45.28	.0931	
61.72	45.92	.0939	
52.107	46.55	.0952	
49.507	46.80	.0959	
Poe and Plein, 1934			
%	(α) _D	%	(α) _D
20°			
98	43.4	70	46
92.5	43.8	63	47.05
85	44.5	55	47.9
77.5	45.3	50	48.25
Pariaud, 1951 (fig.)			
%	(α) _D	%	(α) _D
23°			
0	55	90.9	43.3
71.4	48.3	95.2	42.5
77.7	45.8	96.5	-
83.3	45	96.7	42.2
		97.3	42
Camphor (C ₁₀ H ₁₆ O) + Propyl alcohol (C ₃ H ₈ O)			
Golse, 1911			
%	d	n_D	
20°			
100	0.8046	1.3855	
87.81	0.8210	1.3940	
76.10	0.8380	1.4030	
64.90	0.8543	1.4124	
54.07	0.8709	1.4212	
43.63	0.8874	1.4293	

Watterfors, 1920

%	d
18.5°	
87.85	0.8233
76.17	0.8398
64.94	0.8564
54.22	0.8729
43.79	0.8892

σ %	n	
7100 Å		
87.85	25.67	1.3926
76.17	26.36	1.4014
64.94	27.04	1.4101
54.22	27.63	1.4188
43.79	28.21	1.4276
5890 Å		
87.85	44.09	1.3956
76.17	45.27	1.4045
64.94	46.44	1.4134
54.22	47.53	1.4223
43.79	48.54	1.4310
5460 Å		
87.85	56.51	1.3972
76.17	57.94	1.4061
64.94	59.35	1.4152
54.22	60.71	1.4241
43.79	61.99	1.4329
4360 Å		
87.85	133.69	1.4041
76.17	137.11	1.4134
64.94	140.10	1.4226
54.22	143.01	1.4317
43.79	145.88	1.4409

Camphor ($C_{10}H_{16}O$) + Allyl alcohol (C_3H_6O)

Pariaud, 1951 (fig.)

mol %	D
at room t.	
0	55
66.6	45
75.0	43.5
83.3	43.1
91.6	40

Camphor ($C_{10}H_{16}O$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.	sat. t.
0	209.1	-
40	186.15 Az	117
100	197.4	-

Camphor ($C_{10}H_{16}O$) + Borneol ($C_{10}H_{18}O$)

Vanstone, 1910

t	p	t	p
0 %			
78.4	6.8	132.0	76.7
80.0	7.1	134.2	84.2
92.4	13.1	136.3	91.0
100.0	19.5	140.3	105.0
101.0	20.5	141.7	110.0
109.4	30.8	147.0	131.0
116.7	42.6	154.3	165.8
127.4	65.5		
20 mol %			
78.6	6.10	131.6	66.90
97.0	15.90	131.8	67.50
97.4	16.04	156.2	159.40
110.6	28.13		
40 mol %			
78.4	5.54	131.0	63.70
97.2	13.27	156.4	150.5
110.0	25.60		
60 mol %			
78.5	4.83	131.2	60.58
97.1	11.40	156.0	140.00
110.2	23.05		
80 mol %			
78.6	3.56	110.8	20.00
96.8	8.80	131.8	56.40
97.1	9.10	156.2	130.20
110.6	19.70		
100 mol %			
78.0	2.30	130.2	40.4
95.2	6.67	150.2	96.6
110.5	15.70	158.4	127.2
mol %	p	mol %	p
110°			
10	30.4	60	20.9
20	27.8	70	19.9
30	27.1	80	18.2
40	25.0	90	17.9
50	24.0		

Vanstone, 1909				Timmermans, 1930					
%	f. t.	%	f. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	178.6	67.8	200.3	0	178.8	178.8	60	196.3	190.5
9.9	181.9	79.5	203.4	10	182.0	179.8	70	198.8	193.6
20.2	185.3	90.0	206.0	20	185.4	189.4	80	201.5	196.8
39.8	191.1	40.0	192.4	30	188.4	183.2	90	204.0	200.6
48.0	194.9	59.8	198.5	40	191.2	185.3	100	206.4	206.4
63.0	199.6	100	208.6	50	193.8	187.8			
Efremov, 1915				Camphor ($C_{10}H_{16}O$) + Menthol ($C_{10}H_{20}O$)					
mol%	f. t.	m. t.	tr. t.	Pawlewski, 1893 and 1899					
				mol%	f. t.	mol%	f. t.		
0	178.0	178.0	98.1	0	175	53.46	19		
0.99	178.1	177.1	98.0	3.89	163.5	64.16	-		
2.97	178.2	176.6	97.2	7.36	155	74.57	22.5		
4.93	178.5	176.4	95.0	11.46	142	79.65	28.7		
9.89	180.1	177.6	89.1	23.27	103	86.29	34.5		
14.86	181.5	178.0	69.3	29.65	96	91.75	36.3		
19.80	182.8	178.4	-	44.92	48	94.54	39.6		
24.73	184.4	179.8	-	49.15	36	100	43.0		
29.71	185.7	180.4	-	49.46	34.5				
39.69	188.4	182.6	-						
46.67	191.2	185.8	-						
59.70	194.3	188.2	-						
69.76	196.9	191.9	-						
74.78	198.4	194.1	-						
79.79	199.7	196.8	44.0						
84.85	201.8	199.1	52.2						
89.89	203.4	201.3	59.0						
94.92	205.3	203.9	65.1						
96.96	206.0	205.1	66.7						
98.99	206.5	206.0	68.6						
100	207.0	207	69.1						
Ross and Somerville, 1926				Oxymethylene camphor ($C_{11}H_{16}O_2$) + Methyl alcohol (CH_3O)					
%	f. t.			Brühl, 1900					
				%	t	d	H_α	n_D	H_γ
100.0	206.5			51.399	16.7	0.9293	1.41526	1.41806	1.43057
90.4	201.7			0	18.1	.7947	.32830	.32983	.33662
75.7	198.5								
57.3	195.2								
49.0	192.7								
37.8	188.9								
21.3	185.3								
8.4	181.4								
0.0	178.6								

Fenchone ($C_{10}H_{16}O$) + Methyl alcohol (CH_4O)

Pariaud, 1951 (fig.)

mol%	$(\alpha)_D$
15°	
0	39.5
83.3	35
90.9	32
95.2	30
96.5	29.6

Fenchone ($C_{10}H_{16}O$) + Ethyl alcohol (C_2H_6O)

Pariaud, 1951 (fig.)

mol%	d	$(\alpha)_D$	
		sample 1	sample 2
17°			
0	-	39.50	65.75
66.6	0.895	33.3	63.2
80.0	.865	32.4	62.8
90.9	.830	31.8	62.5
95.2	.815	30.3	62.1
96.7	.812	29	61.7
97.3	.808	27.7	60.8

Fenchone ($C_{10}H_{16}O$) + Butyl alcohol ($C_4H_{10}O$)

Pariaud, 1951 (fig.)

mol%	$(\alpha)_D$
17°	
0	39.5
66.6	35
83.3	33.5
90.9	31.50
93.7	30

Fenchone ($C_{10}H_{16}O$) + Isobutyl alcohol ($C_4H_{10}O$)

Pariaud, 1951 (fig.)

mol%	$(\alpha)_D$	mol%	$(\alpha)_D$
17.5			
0	39.5	90.0	30
50	35	90.9	29.5
66.6	33	92.8	28.5
83.3	31.8		

Fenchone ($C_{10}H_{16}O$) + Allyl Alcohol (C_3H_6O)

Pariaud, 1951 (fig.)

mol%	d	$(\alpha)_D$	mol%	d	$(\alpha)_D$
17°					
0	39.5	0.943	90.0	28.5	0.878
75.0	31.6	.903	93.7	27.3	.870
80.0	30.7	.893	95.2	26.2	.868
87.5	29	.883	95.6	25.8	.868

Fenchone ($C_{10}H_{16}O$) + Fenchyl alcohol ($C_{10}H_{18}O$)

Fischer, 1940

mol%	f. t.	E	mol%	f. t.	E
0	+6.03	-	61.9	-10.8	-39.5
20.0	-4.9	-	74.2	+11.6	-40.0
46.2	-30.5	-41.0	93.2	+35.2	-
58.3	-20.1	-40.1	100	+42.1	-

Fenchone ($C_{10}H_{16}O$) + Benzyl alcohol (C_7H_8O)

Pariaud, 1951 (fig.)

mol%	d	$(\alpha)_D$
16°		
50	-	30
66.6	1.013	27
83.3	.026	23
90.9	.038	19.8
93.3	.041	8

Pulegone ($C_{10}H_{16}O$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.
0	223.8
58	191.2 Az
100	297.4

Carvone ($C_{10}H_{14}O$) (b. t.=231.0) + Alcohols.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Decyl alcohol	($C_{10}H_{22}O$)	232.8	19	230.85	-2.8 (30%)
Glycol	($C_2H_6O_2$)	197.4	60.8	192.5	97.8
Glycerol	($C_3H_8O_3$)	290.5	3	230.85	
Geraniol	($C_{15}H_{26}O$)	229.6	60	229.2	-1.1 (90%)

Chlorcamphord($C_{10}H_{15}OCl$) + Borneol ($C_{10}H_{18}O$)

Timmermans, 1930

mol%	f. t.	E	mol%	f. t.	E
0	93	-	50	146.5	84
3	84	84	60	158.5	"
10	95	"	70	171	"
20	109	"	80	182.5	"
30	122	"	90	195	"
40	134	"	100	207	"

Bromcamphor ($C_{10}H_{15}OBr$) + Methyl alcohol (CH_4O)

Vandenberghe, 1903

%	D b. t.
90.91	+0.36
84.75	.622
84.03	.625
78.74	.832
77.52	.88

Bromcamphord($C_{10}H_{15}OBr$) + Ethyl alcohol (C_2H_6O)

Haller, 1892

%	f. t.	%	f. t.
89.24	15.25	43.48	50
83.57	25.5	25.64	55
66.34	40.5	12.42	60.5-61
		0	75

Bromcamphor d ($C_{10}H_{15}OBr$) + Borneol (d, l or r)
($C_{10}H_{18}O$)

Timmermans, 1930

mol%	f. t.	E	mol%	f. t.	E
0	76.5	-	50	129	54.8
7	54.8	54.8	60	145	"
10	61	"	70	160.5	"
20	80	"	80	176	"
30	98	"	90	191.5	"
40	114	"	100	206.5	"

Bromcamphor r ($C_{10}H_{15}OBr$) + Borneol (d or r)

Timmermans, 1930

mol%	f. t.	E	mol%	f. t.	E
0	57	-	50	138.5	49.5
2	49.5	49.5	60	154	"
10	66	"	70	169	"
20	84.5	"	80	183	"
30	103.5	"	90	195.5	"
40	122	"	100	208	"

Bromcamphor ($C_{10}H_{15}OBr$) + Borneol ($C_{10}H_{18}O$)

Hrynakowski, Staszewski and Szymt, 1936

%	f. t.	m. t.	%	f. t.	m. t.
0	67.0	64.0	40	134.5	110.0
2	65.5	61.7	45	141.8	114.5
4	63.5	61.0	50	149.0	127.5
6	62.8	61.0	60	163.2	143.0
10	73.6	65.0	65	170.8	150.0
20	94.0	-	70	175.8	160.0
30	116.0	93.0	80	191.0	180.0
35	126.5	-	90	202.5	-

Formyl bromcamphor ($C_{11}H_{15}O_2Br$) + Methyl alcohol
(CH_3O)

Brühl, 1900

%	t	d	n_D^{20}	n_D^{25}	n_D^{30}
54.054	19.0	0.9955	1.39096	1.39303	1.40223
100	18.1	.7947	.32830	.32983	.33662

Acetophenone (C_8H_8O) (b.t.=202.0) + Alcohols
Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Octyl alcohol	($C_8H_{18}O$)	195.2	87.5	194.95	-2.0 (88%)
Glycol	($C_2H_6O_2$)	197.4	52	185.85	114.5
Propylen glycol	($C_3H_8O_2$)	187.8	-	183.5	-
Methoxy diglycol	($C_5H_{12}O_3$)	192.95	80	191.9	-0.5 (71%)
Linalool	($C_{10}H_{18}O$)	198.6	86	198.0	-1.7
Isoamyl lactate	($C_8H_{16}O_3$)	202.4	52	201.7	-0.3

Acetophenone (C_8H_8O) + Glycerol ($C_3H_8O_3$)

Mac Ewen, 1923

%	sat.t.	%	sat.t.	
2.37	90.5	58	185.0	C.S.T.
4.70	113.5	65.38	184.0	
16.58	162.5	78.86	174.5	
24.93	175.5	84.12	164.0	
38.10	182.6	91.14	136.5	
46.68	185.5	95.62	97.5	
48.87	185.4			

Acetophenone (C_8H_8O) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)					
		red	yellow	green	pale blue	dark blue	viol.
50.384	-7.94	-9.92	-10.22	-12.70	-12.90	-14.79	
25.192	-8.53	-10.84	-12.86	-15.76	-16.59	-	
12.596	-10.80	-12.23	-14.29	-18.34	-19.29	-	
4.939	-11.14	-13.36	-15.39	-18.63	-21.06	-23.69	
2.4695	-11.74	-13.77	-16.20	-20.65	-22.68	-	

Propiophenone ($C_9H_{10}O$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.
0	217.7
57	190.2 Az
100	197.4

Propiophenone ($C_9H_{10}O$) + Dibrom 2,3-propanol
($C_3H_6OBr_2$)

Lecat, 1949

%	b.t.
0	217.7
-	222.0 Az
100	219.5

p-Methylacetophenone ($C_9H_{10}O$) (b.t.=226.35) +

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix. or Sat.t.
Glycol	($C_2H_6O_2$)	197.4	59.8	192.2	77.5
Citronellol	($C_{10}H_{18}O$)	224.4	68	223.7	
Geraniol	($C_{10}H_{18}O$)	229.6	5	226.25	-1.0 (10%)
Dibrom 2,3'-propanol 1	($C_3H_6OBr_2$)	219.5	-	228.2	

Methylbenzylglyoxal (C ₁₀ H ₁₀ O ₂) Ketone + Enol			
Moureu, 1930			
%	n _D	%	n _D
16°			
0.0	1.5192	22.94	1.5441
2.11	.5219	25.45	.5469
4.47	.5246	28.5	.5499
7.49	.5272	36.9	.5590
11.4	.5319	44.9	.5674
15.54	.5362	49.1	.5721
19.14	.5401		
%	n _D	%	n _D
20°			
100	1.5808	18	1.6030
81.68	.6032	16	.6010
76.83	.6106	11	.5950
70.44	.6187	7	.5901
63.79	.6266	6	.5882
Phenylbenzylglyoxal (C ₁₅ H ₁₂ O ₂) Ketone + Enol			
Moureu, 1930			
%	n _D	%	n _D
20°			
0.0	1.5814	23.34	1.6034
3.3	.5849	29.6	.6090
9.7	.5910	34.7	.6132
18.95	.5995		
Phenylanisylglyoxal(C ₁₆ H ₁₄ O ₃) Ketone + Enol			
Moureu, 1930			
%	b. t.	p	n _D
18	185-190	1	1.6030
16	174-178	0.5	.6010
11	177-180	1	.5950
7	178-180	2	.5901
6	209-211	9	.5882
%	n _D	%	n _D
20°			
100	1.5808	70.44	1.6187
81.68	.6032	63.79	.6266
76.83	.6106		

Benzophenone (C ₁₃ H ₁₀ O) + Benzohydro1 (C ₁₃ H ₁₂ O)			
Schaum and Rosenberger, 1924			
mol%	f. t.	mol%	f. t.
100	67	39	23
90	57.5	30	26
80	48.5	20	33
70	41	10	40
60	34	0	47.5
50	29		
Benzophenone (C ₁₃ H ₁₀ O) + Fenchyl alcohol (C ₁₀ H ₁₆ O)			
Fischer, 1940			
mol%	f. t.	E	
0	48.05	-	
30.1	32.9	-	
58.2	13.8	3.7	
74.2	12.4	4.9	
86.1	26.7	-	
100	42.1	-	
Benzil (C ₁₄ H ₁₀ O ₂) + Methyl alcohol (CH ₄ O)			
Vandenbergh, 1903			
%	D b. t.		
92.50	+0.26		
85.47	0.523		
77.52	0.79		
Benzil (C ₁₄ H ₁₀ O ₂) + Ethyl alcohol (C ₂ H ₆ O)			
Innes, 1918			
mol%	p		
100	75°	668.5	
99.02		663.1	
97.80		656.4	
94.39		642.8	
87.88		628.3	
77.6		614.7	

Benzil ($C_{14}H_{10}O_2$) + Hydrobenzoin ($C_{14}H_{14}O_2$)

Vanstone, 1913

mol%	f.t.	E	mol%	f.t.	E
100	133.7	-	32.96	97.5	85.8
79.29	124.6	108.0	18.09	85.6	-
61.17	115.8	85.6	6.05	90.6	85.8
46.80	107.8	85.8	0	93.5	-

Benzil ($C_{14}H_{10}O_2$) + Benzoin ($C_{14}H_{12}O_2$)

Vanstone, 1909

mol%	f.t.	mol%	f.t.
0	94.3	50.7	107.3
3.2	89.7	59.0	113.2
15.7	85.4	60.5	113.6
17.7	84.1	64.7	116.2
24.7	84.2	76.2	122.3
27.2	84.4	79.7	124.6
30.5	89.6	88.1	128.4
37.0	96.5	91.7	128.6
39.6	99.2	100	133.2
49.0	106.2		

Benrath, 1913

%	f.t.	%	f.t.
100	134	30	97.5
90	130.5	25	92.5
80	127.5	22	90
70	122.5	20	86
60	117.5	17.5	88
50	112	10	91
40	105	0	95
33.3	101.2		

Methyl desoxybenzoin ($C_{15}H_{14}O$) + Benzoin ($C_{14}H_{12}O_2$)

Preiswerk and Erlenmeyer, 1934

%	f.t.	%	f.t.
0	52.5	50	122.5
5	47.5	65	126.
10	97.5	80	130.
20	108.	100	134.
35	118.		

E : 47°

Quinone ($C_6H_4O_2$) + Triphenylcarbinol ($C_{19}H_{16}O$)

Kreman, Sütter and al., 1922

%	f.t.	%	f.t.
0	116	61	93
10	113.5	65	100
20	110	70	110
30	106	80	128
40	102	90	145
50	98	100	161

Quinone ($C_6H_4O_2$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t	(α) _D
74.98%	
87.5	10.804
115	10.968
122.9	11.128

Estrone ($C_{18}H_{22}O_2$) + Estradiol ($C_{18}H_{24}O_2$)

Ungnade and Morriss, 1947 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	250	245	60	205	184
12	241	-	62	208	185
15	239	226	70	203	168
22	236	-	85	186	165
30	231	-	90	180	-
40	225	203	100	170	168
48	220	198			

Formaldehyde (CH_2O) + Phenol (C_6H_6O)

Ravich and Frolova, 1953

%	Q mix (cal/gr. phenol)
10	0
30	20
40	35
50	75
58	135
70	112
80	70
90	0

Chloral (C_2HOC1_3) + Phenol (C_6H_6O)

Udovenko and Khomenko, fig., 1956.

mol%	40°	η 60°	80°
0	850.3	701.0	565.5
20	2500	1100	800
40	4000	1800	1000
50	5900	2000	1100
60	7000	2400	1200
80	6000	2800	1400
100	4672.0	2526.0	1571.1

Chloral ($C_2H_3OCl_3$) + o-Cresol (C_7H_8O)

Udovenko and Khomenko, 1956 (fig.)

mol%	25°	η 50°	75°
0	1055.2	764.1	588.5
20	2000	1000	700
40	5000	3000	1000
50	16000	4000	1200
60	16100	4500	-
80	10000	3100	-
100	7372.4	2836.8	1521.0

Chloral ($C_2H_3OCl_3$) + m - Cresol (C_7H_8O)

Udovenko and Khomenko, 1956.(fig.)

mol%	25°	η 50°	75°
0	1055.2	764.1	588.5
20	3000	1500	1000
40	12000	4000	1200
50	21000	5000	1300
60	27000	7000	2000
80	18000	5000	2000
100	13095	4196.7	2011.8

Chloral ($C_2H_3OCl_3$) + p - Cresol (C_7H_8O)

Udovenko and Khomenko, 1956.(fig.)

mol%	25°	η 50°	75°
0	1055.2	764.1	588.5
20	3000	1500	1000
40	8000	3000	1500
50	20000	4000	1500
60	28000	5000	2000
80	20000	5000	2200
100	14080	4476.6	2113.5

Citronellal ($C_{10}H_{18}O$) + m-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	208.0
-	208.2 Az
100	202.2

Citronellal ($C_{10}H_{18}O$) + Guaiacol ($C_7H_8O_2$)

Lecat, 1949

%	b. t.	Sat. t.
0	208.0	-
86.5	204.55	18
100	205.05	-

Cyclohexanone ($C_6H_{10}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	155.7
72	184.8 Az
100	182.2

Benzaldehyde (C_7H_6O) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	179.2
51	186.0 Az
100	182.2

Benzaldehyde (C_7H_6O) + Cresol-o (C_7H_8O)

Lecat, 1949

%	b. t.
0	179.2
77	192.0 Az
100	191.1

Piperonal ($C_8H_6O_3$) + Vanillin ($C_8H_8O_3$)

Lehmann, 1914

%	f. t.	%	f. t.
100	81.8	90	77.3
99	81.0	85	77.0
98	80.7	80	75.0
97	80.0	75	75.0
96	"	70	74.2
95	"	65	73.5
94	"	60	"
93	79.3	55	73.0
92	79.2	50	68.5
91	79.0	0	37

Anisaldehyde ($C_8H_8O_2$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	249.5
25	253.0 Az
100	245.9

Cinnamic aldehyde (C_9H_8O) + Resorcinol ($C_6H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
0	-10	52.4	47
14.1	-3	60.5	68
22.1	-1	71.3	87
29.7	+12	83.4	98
37.4	17	93.0	105.5
44.0	21	100	110
46.3	25.5		

Cinnamic aldehyde (C_9H_8O) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	103.5	38.7	21
92	97	23.3	19
83.8	92	25	15.5
74.5	84.5	17.9	10
66.1	74	11.6	5
57.9	61	5.5	-1
48.9	28	0	-10
45.3	22		

Cinnamic aldehyde (C_9H_8O) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	44.5	43.7	+1.5
93.5	42.0	38.2	-8
87.0	39.0	34.2	-1
79.2	34.0	30.2	-1
71.4	28.5	7.1	-1
63	21.5	3.7	-12
54.8	14.0	0	-10
45.9	7.5		

Cinnamic aldehyde (C_9H_8O) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	95	45.0	+19
92.6	88	35.5	+4
82.5	76	22.6	-3
71.6	64.0	8.0	-16
61.0	51.0	0	-10
51.4	32.0		

Cinnamic aldehyde (C_9H_8O) + p-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	113	43.6	32
92.8	105.0	38.6	30
85	95.0	33.2	25
73.8	82	28.3	18
65.7	70	21.9	5
61.0	61	15.2	-10
57.2	50	10.5	-25
54.5	45	10.2	-25
53.4	32	3.8	-14
49.8	33	0	-10
47.4	32.5		

Cinnamic aldehyde (C_9H_8O) + β -Naphthol ($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	121	47.8	36
94.2	118	42.2	0
77.4	98	19.5	0
66.6	79	9.7	0
56.6	59	0	-10

Cinnamic aldehyde (C_9H_8O) + α -Naphthol ($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	95	52.9	11
89.7	86	0	-10
75.5	66		
63.0	40		

Acetone (C_3H_6O) + Phenol (C_6H_6O)

Schreinemakers, 1902

%	p			
	50°	65.5°	68°	75°
0	605	760	-	-
10.74	567	713	-	-
20.32	514	647	-	-
31.13	447	562	794	-
40.20	377	475	695	-
50.17	290	367	538	678
59.07	206	263	394	497
65.56	149	192	291	369
73.30	96	120	179	277
79.09	-	-	114	148

Weissenberger, Schuster and Schuler, 1924

mol%	p	mol%	p
15°			
80.00	8	50.43	43
66.70	15	45.42	54
64.40	22	39.22	68
54.3	33	0	85

Weissenberger, Henke and Sperling, 1925

mol%	p	
	20°	
75	6.1	
60	20.7	
50	39.4	
40	65.9	
25	107.9	
0	179.6	

Schreinemakers, 1902

%	b. t.			
	200mm	380mm	600mm	760mm
0	22.1	37.4	49.7	56.5
10.74	23.6	39.3	51.5	58.4
20.32	26.0	41.8	54.3	61.3
31.13	29.3	45.5	58.4	65.7
40.20	33.4	50.2	63.5	70.7
50.17	40.2	57.5	71.2	78.8
59.07	49.2	67.0	81.1	89.2
65.56	57.7	75.9	90.7	98.5
73.30	71.2	90.1	-	-
79.09	84.2	-	-	-

Lang, 1912

%	f. t.	%	f. t.
100	42.1	64.8	9.0
90.0	20.5	60.0	4.3
86.9	10.3	55.0	-2.0
85.0	6.5	51.5	-4.5
84.3	4.3	50.0	-8.0
83.1	11.1	47.7	-10.5
82.1	12.9	39.1	-22
80.0	14.2	31.1	-38
78.2	14.8	24.1	-51.5
72.5	14.5	19.7	-60
70.0	13.2	13.0	-

Schmidlin and Lang, 1912

%	f. t.	%	f. t.
0	-95	70	+14
10	-83	76.0	+14.8 (1+2)
20	-56	80	+14
30	-37	84	+2 E
40	-22	90	+20
50	-7	100	+41
60	+6		

Biron, Nikitin and Jakobson, 1913

mol%	d	mol%	d
0	15°	0	35°
27.523	0.7968	4.956	0.7749
46.347	0.8962	9.992	0.7947
56.929	0.9543	20.134	0.8144
66.554	0.9836	32.937	0.8515
71.173	1.0067	49.448	0.8948
	1.0174	67.194	0.9462
		74.945	0.9927
		84.437	1.0104
		90.010	1.0318
		100	1.0430
			1.0628

Bramley, 1916

%	d	
	9.95°	20.05°
0.00	0.8031	0.7912
14.19	0.8425	0.8315
26.72	0.8768	0.8662
38.06	0.9085	0.8983
49.43	0.9406	0.9308
57.79	0.9642	0.9547
65.22	0.9851	0.9757
73.74	1.0090	0.9998
78.94	1.0237	1.0146
85.39	1.0420	1.0334
92.85	1.0623	1.0538
100.00	1.0836	1.0752

% d				Morgan and Scarlett, 1917			
29.8° 40.1° 49.8°				% σ % σ			
0.00 0.7799 0.7676 0.7559				0° 35°			
9.57 0.8056 0.7940 0.7830				100 41.701 100 38.033			
19.53 0.8336 0.8223 0.8116				40.02 30.24 61.53 30.465			
27.70 0.8572 0.8460 0.8335				35.40 29.44 50.27 28.001			
37.42 0.8855 0.8743 0.8636				29.22 28.48 39.99 26.141			
44.67 0.9063 0.8952 0.8846				0 25.17 34.99 25.257			
53.79 0.9330 0.9220 0.9115				29.97 24.423			
60.24 0.9520 0.9416 0.9316				25.04 23.701			
67.19 0.9724 0.9625 0.9530				0 20.953			
74.25 0.9935 0.9837 0.9733							
80.76 1.0115 1.0022 0.9933							
87.98 1.0327 1.0237 1.0150							
92.81 1.0466 1.0378 1.0293							
100.00 1.0668 1.0584 1.0503							
% η				Acetone (C ₃ H ₆ O) + o-Cresol (C ₇ H ₈ O)			
9.95° 20.05°				Weissenberger and Piatti, 1924			
0.00 360 323				mol% p mol% p			
14.19 486 429				18°			
26.72 635 560				96.15 2.4 41.27 74.5			
38.06 868 755				89.28 3.1 35.43 95.0			
49.43 1256 1055				78.17 6.9 33.33 108.5			
57.79 1688 1379				71.32 12.3 25.94 120.0			
65.22 2358 1853				66.66 17.2 25.00 123.6			
73.74 3670 2750				58.36 32.6 0 163.65			
78.94 4950 3590				50.00 51.8			
85.39 7480 4970							
92.85 1193 730							
100.00 201.0 110.4							
% η				Piatti, 1936			
29.8° 40.1° 49.8°				mol% b. t.			
0.00 295 270 248				100 190.7			
9.57 360 328 299				90 159.4			
19.53 441 399 360				80 136.5			
27.70 521 470 422				70 120.1			
37.42 670 590 530				60 105.0			
44.67 808 711 628				50 92.5			
53.79 1058 904 794				40 81.1			
60.24 1319 1101 950				30 72.0			
67.19 1658 1363 1150				20 65.0			
74.25 2180 1741 1425				10 59.5			
80.76 2910 2230 1785				0 56.0			
87.98 3915 2875 2245							
92.81 4905 3465 2615							
100.00 7100 474 328							
Weissenberger, Schuster and Schuler, 1924				Weissenberger and Piatti, 1924			
mol% η mol% σ (water = 1)				% η % η (water = 1)			
15°				18°			
72.43 2.90 78.16 0.466				80.0 3.30 27.47 0.57			
61.87 1.90 66.66 0.451				78.17 3.05 21.16 0.49			
50.43 1.30 50.43 0.430				65.37 1.90 19.32 0.48			
39.22 0.93 39.22 0.415				50.00 1.30 15.27 0.45			
33.33 0.76 33.22 0.401				44.56 1.03 0 0.29			
28.00 0.66 25.31 0.380				34.76 0.73			
25.00 0.61							

mol%	σ	mol%	σ
(water = 1)			
18°			
100	0.459	22.34	0.401
66.66	0.439	19.32	0.396
49.22	0.431	15.27	0.391
35.47	0.417	0	0.315
27.47	0.402		
Acetone (C_3H_6O) + m-Cresol (C_7H_8O)			
Weissenberger and Piatti, 1924			
mol%	p	mol%	p
18°			
88.96	2.6	45.43	64.7
77.83	8.0	41.70	75.6
66.66	21.4	36.43	96.5
62.38	29.3	33.33	109.2
61.34	32.3	26.62	120.5
48.3	54.6	0	163.65
Piatti, 1936			
mol%	b. t.		
100	201.5		
90	165.1		
80	141.8		
70	123.0		
60	108.7		
50	94.0		
40	82.4		
30	73.2		
20	66.5		
10	60.5		
0	56.0		
Weissenberger and Piatti, 1924			
mol%	η	mol%	η
(water = 1)			
18°			
78.17	6.10	29.93	0.72
68.34	3.04	26.06	0.64
58.43	2.10	19.07	0.53
50.00	1.50	12.39	0.47
43.26	1.09	0	0.29
37.52	0.87		

mol%	σ	mol%	σ
(water = 1)			
18°			
100	0.437	29.94	0.415
78.17	0.442	26.06	0.410
66.66	0.447	18.57	0.402
58.74	0.445	16.54	0.395
49.53	0.437	0	0.315
40.17	0.431		
Acetone (C_3H_6O) + p-Cresol (C_7H_8O)			
Weissenberger and Piatti, 1924			
mol%	p	mol%	p
18°			
96.15	2.5	41.27	76.4
89.28	3.2	35.43	96.7
78.17	7.0	33.33	108.4
71.32	12.9	28.00	117.0
66.66	18.6	22.22	127.5
58.43	34.9	0	163.65
48.35			
Piatti, 1936			
mol%	b. t.	mol%	b. t.
100	202.2	40	82.6
90	165.7	30	73.3
80	142.3	20	66.5
70	123.4	10	60.5
60	109.0	0	56.0
50	94.2		
Weissenberg and Piatti, 1924			
mol%	η	mol%	η
(water = 1)			
18°			
94.33	13.85	37.43	0.82
68.02	3.83	23.34	0.57
66.66	3.20	19.31	0.50
62.43	2.79	15.27	0.43
50.25	1.88	0	0.29
43.26	1.19		
mol%	σ	mol%	σ
(water = 1)			
18°			
76.45	0.437	32.26	0.431
66.66	0.447	23.34	0.409
59.27	0.450	19.31	0.401
50.25	0.447	15.27	0.392
38.43	0.444	0	0.315

Acetone (C_3H_6O) + Cresol (C_7H_8O)

Berl and Schwebel, 1922

%		p	
		0°	20°
6.3	0.76		2.39
7.7	1.20		3.31
12.9	2.71		7.56
18.3	5.30		15.45

Acetone (C_3H_6O) + Guaiacol ($C_7H_8O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η	σ
(water = 1)			
17°			
80	14.4	4.1	0.63
67	30.2	3.0	0.60
50	56.0	2.0	0.55
40	74.7	1.5	0.52
34	87.6	1.0	0.49
29	95.3	0.9	0.48

Pushin and Pinter, 1929

mol%	d	η
30°		
100	1.1236	4450
90	1.1056	3670
80	1.0863	2950
70	1.0624	2350
60	1.0360	1820
50	0.9973	1260
40	0.9706	1030
30	0.9300	755
20	0.8896	573
10	0.8357	440
0	0.7781	330

Acetone (C_3H_6O) + Thymol ($C_{10}H_{14}O$)

Zoppellari, 1905

%	t	d	n_D
6.4781	4	0.81906	1.37566
12.2926	5.5	0.82763	1.38390
22.5853	3.6	0.84632	1.40015
29.2116	4.1	0.85368	1.40916
40.0179	12.1	0.86793	1.42457

Acetone (C_3H_6O) + Pyrocatechol ($C_6H_6O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p
17°	
48	30.9
40	48.7
34	63.5
29	76.6
20	102.5

Lang, 1912 and Schmidlin and Lang, 1912

%	f.t.	%	f.t.
9.1	-	67.0	29.2
20.0	-	68.2	35.2
30.0	-	73.1	52.1
41.3	-59.8	77.0	63.8
46.0	-48.2	78.0	67.5
50.0	-39.5	79.0	70
54.0	-36.6	79.2	63.5
55.0	-33.3	80.0	73
57.0	-32.5	81.4	76.5
59.0	-24.1	83.2	83.5
60.0	-21.7	84.6	83.5
61.0	-13	85.0	83.5
65.0	+16.0	86.4	86.1
65.3	15	88.8	90.2
66.0	21	100	115

(1 + 1)

Walker, Collett and Lazzell, 1931

mol %	f.t.
100.00	104.5
82.21	91.0
70.78	77.4
58.66	53.2

Weissenberger, Henke and Bregmann, 1925

mol%	η	σ
(water = 1)		
48	5.8	0.43
46	4.8	0.42
42	3.6	0.42
40	3.1	0.42
34	2.0	0.41
29	1.4	0.40
25	1.2	0.39
22	0.9	0.39

Acetone (C_3H_6O) + Resorcinol ($C_6H_6O_2$)				Walker, Collett and Lazzell, 1931			
Weissenberger, Henke and Bregmann, 1925							
mol%		p		mol%		f.t.	
		17°	20°				
50		19.6	-	59.12		51.8	
48		23.6	-	67.93		75.1	
40		40.6	44.7	85.49		98.3	
34		58.6	70.4	100.00		109.4	
25		82.1	103.2				
20		100.2	119.0				
0		-	179.6				
Shakhparonov and Martinova, 1953				Shakhparonov and Martinova, 1953			
mol %		p		mol%		d (V) (g/l)	
		0°	5°			0°	5°
0		69.70	84.50	0		0.2375	0.2830
2		68.25	-	2		0.2323	-
5		65.42	81.45	5		0.2228	0.2725
15		55.15	59.35	15		0.1878	0.2320
20		48.83	62.58	20		0.1664	0.2097
25		44.92	53.98	25		0.1530	0.1808
30		41.44	-	30		0.1412	-
Schmidlin and Lang, 1912				Weissenberger, Henke and Bregmann, 1925			
%		f.t.		mol%		η σ	
						(water = 1)	
0	-95	59	-46			17°	
10	-83	65	+13	50	9.9	0.52	
20	-57	70	+40	48	-	-	
30	-42	80	+65	40	7.0	0.49	
40	-32	90	96	34	3.6	0.47	
50	-30	100	109	25	1.7	0.42	
(2 + 1) f.t. = -28°				20	1.2	0.39	
Lang, 1912				Timofeev, 1905			
%		f.t.		%		Q dil	
						initial final (by mole resorcinol)	
20.0	-58.4	67.0	+26.5	0	2.55	+931	
30.0	-43.5	73.1	53.3	2.55	5.3	+797	
40.0	-32.3	79.2	72.5	17.4	19.2	+274	
45.5	-29.6	81.4	78.5	34.3	35.4	-459	
50.0	-28.8	83.2	82.8				
55.0	-33.2	84.6	86.5				
60.0	-38.3	86.4	91.0				
65.0	+12.0	100	109				

Acetone (C_3H_6O) + Hydroquinone ($C_6H_6O_2$)

Lang, 1912 and Schmidlin and Lang, 1912

%	f.t.	%	f.t.
10	-4	60	137
20	+22	70	147
30	42	80	145
40	52.5	90	158.5
50	64		

(1 + 1)

Walker, Collett and Lazzell, 1931

mol%	f.t.	mol%	f.t.
100.00	172.9	38.37	82.4
82.84	160.3	35.17	69.5
71.55	148.4	34.11	66.5
58.78	131.3	29.54	58.8
46.45	105.3	25.98	54.8
40.61	90.2	21.25	45.6

Acetone (C_3H_6O) + Pyrogallol ($C_6H_6O_3$)

Weissenberger, Schuster and Henke, 1925

mol %	p
20°	
40.00	62.6
33.33	83.9
28.00	106.8
25.00	128.7
20.00	142.2
0	163.65

mol%	σ	η
(water=1)		
20°		
40.00	0.484	1.24
33.33	0.449	0.65
28.00	0.422	0.38
25.00	0.359	0.27
20.00	0.265	0.16
0	0.313	-

Lang, 1912 and Schmidlin and Lang, 1912

%	f.t.	%	f.t.
100	+155	59.1	+2.0
83.3	102	55.0	-26.5
81.6	96	50.0	26.3
78.1	88	50.9	-
76.7	83	45.0	24.4
75.0	78	44.3	24.2
73.1	71	40.0	23.9
70.8	63.5	39.7	24.5
68.2	52.8	34.8	26
67.0	46.9	30.1	28.5
66.0	45.5	14.1	54
65.0	32	9.3	64.5
62.0	-10.0		

(3+1)

Tarasov, Bering and Sidorova, 1936

%	d	π
22°		
0	0.7980	92.5
10	0.8426	79.6
20	0.8909	68.3
30	0.9437	58.8
35	0.9701	55.4
40	0.9965	50.8
42	1.0072	49.25
43	1.0125	49.9
45	1.0229	47.45
50	1.0493	43.5

Acetone (C_3H_6O) + Salicylic aldehyde ($C_7H_6O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η	σ
(water = 1)			
17°			
80	30.6	1.8	0.61
67	50.2	1.7	0.57
50	75.8	1.0	0.52
34	103.6	0.7	0.49
25	116.1	0.6	0.46
20	124.9	0.6	0.45
17	-	0.6	0.44
16	129.0	-	-
14	132.0	-	-

Acetone (C ₃ H ₆ O) + Ammonium salicylate (C ₇ H ₉ O ₃ N)					
Henstock, 1934					
%		f. t.			
40.48		15			
55.21		25			
22.16		35			
27.01		45			
31.51		55			
40.30		65			
Acetone (C ₃ H ₆ O) + o-Chlorphenol (C ₆ H ₅ OC1)					
Bramley, 1916					
%		mol%	f. t.	%	
mol%		f. t.	mol%		f. t.
0		0	-94.0	51.06	32.0
5.68		2.65	95.0	58.51	38.85
9.82		4.68	96.0	64.12	44.6
14.60		7.12	97.0	70.81	52.2
19.47		9.81	84.8	75.70	58.45
24.24		12.62	76.9	"	"
28.95		15.55	70.6	79.64	63.8
33.55		18.55	65.7	84.16	70.5
38.05		21.7	61.2	90.88	81.8
42.86		25.35	-56.3	96.34	93.4
E ₁ : 7.2 mol%			-97.1	100	100
E ₂ : 62.4 mol%			-47.6		
%		d			
		0°	10°	20°	
0.00		0.8146	0.8030	0.7912	
18.49		0.8799	0.8688	0.8576	
32.38		0.9363	0.9255	0.9147	
49.95		1.0138	1.0032	0.9924	
60.49		1.0639	1.0533	1.0427	
71.01		1.1176	1.1069	1.0962	
83.22		1.1826	1.1718	1.1609	
91.73		1.2284	1.2172	1.2060	
100.00		1.2741	1.2626	1.2512	
%		d			
		30°	40°	50°	
0.00		0.7793	0.7674	0.7555	
18.49		0.8464	0.8352	0.8240	
32.38		0.9039	0.8930	0.8821	
49.95		0.9818	0.9712	0.9604	
60.49		1.0321	1.0215	1.0109	
71.01		1.0856	1.0748	1.0642	
83.22		1.1501	1.1393	1.1285	
91.73		1.1948	1.1836	1.1725	
100.00		1.2399	1.2284	1.2172	
%		d			
		60°	70°		
59.37		0.9948	0.9837		
68.23		1.0391	1.0280		
76.99		1.0848	1.0736		
84.64		1.1242	1.1130		
91.08		1.1581	1.1468		
100.00		1.2069	1.1947		

%		η		
		30°	40°	50°
0.00		295	270	248
18.49		419	382	351.5
32.38		569	508	465
49.95		893	777	687
60.49		1199	1019	893
71.01		1684	1369	1154
83.22		2400	1886	1527
91.73		2850	2165	1735
100.00		3080	2320	1871
%		η		
		0°	10°	20°
0.00		395.5	360	323.5
18.49		587	527	475
32.38		787	692	611
49.95		1398	1162	992
60.49		2135	1682	1376
71.01		3590	2675	2051
83.22		6750	4470	3170
91.73		9400	5800	3910
100.00		10790	6390	4210
%		η		
		60°	70°	
59.37		729	641	
68.23		918	791	
76.99		1107	952	
84.64		1289	1087	
91.08		1422	1187	
100.00		1513	1266	
Bramley, 1916				
%		U	%	
			U	
		0° - 20°		
0		0.500	68.95	0.431
9.02		0.489	73.3	0.425
25.35		0.468	78.0	0.422
37.6		0.455	80.8	0.423
47.65		0.445	90.0	0.411
55.0		0.440	100	0.401
68.7		0.428		
%		Q mix	%	
		cal/100g	Q mix	
			cal/100g	
38.00		794	70.65	1157
46.55		935	72.45	1141
50.0		999	74.0	1123
55.95		1076	76.3	1089
57.3		1086	78.1	1054
62.4		1136	80.9	966
66.2		1154	82.9	906
68.85		1160	86.1	776

Acetone (C_3H_6O) + p-Chlorphenol (C_6H_5OCl)

Weissenberger, Schuster and Lielacher, 1925

mol%	p	mol%	p
20°			
0	179.6	50	31.5
10	155.0	60	15.3
20	123.2	70	6.5
30	86.8	80	2.0
40	54.0		

Acetone (C_3H_6O) + o-Nitrophenol ($C_6H_5O_3N$)

Shakhparonov and Martinova, 1953

mol%	p		
	0°	2°	
0	69.70	76.96	
5	67.50	74.89	
10	63.46	70.27	
12	60.56	67.92	
15	59.66	65.00	
30	50.00	54.15	

Carrick, 1922

%	f.t.	%	f.t.
100	44	67.88	16.1
92.56	36.5	62.48	11.5
84.98	30.3	56.79	6.0
79.97	26.1	50.60	0.2
70.50	20.1		

Shakhparonov and Martinova, 1953

mol%	d	Vapour phase
	0°	2°
0	0.2375	0.2600
5	0.2300	0.2530
10	0.2160	0.2380
12	0.2060	0.2295
15	0.2030	0.2200
30	0.1700	0.1832

Acetone (C_3H_6O) + m-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f.t.	%	f.t.
100	93	75.08	43.0
92.88	84.0	71.85	34.5
90.05	74.5	69.08	25.0
84.21	63.0	65.63	10.1
80.87	55.2	62.95	0.2

Acetone (C_3H_6O) + p-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f.t.	%	f.t.
100	114	73.97	41.2
92.30	97.0	72.43	33.2
88.78	85.6	69.66	24.6
84.54	75.2	68.87	18.1
80.16	61.7	67.15	10.1
76.63	50.4	66.99	0

Acetone (C_3H_6O) + ar-Tetrahydro-2-naphthol($C_{10}H_{12}O$)

Weissenberger, Schuster and Mayer, 1924

mol%	p	mol%	p
18°			
50.00	58	33.33	95
40.00	78	25.00	122
36.34	86	0	163.65

mol% η σ
(water = 1)

18°		
50.00	5.9	0.398
40.00	3.1	0.436
33.33	1.7	0.390
25.00	0.79	0.340
0	0.29	0.315

Acetone (C_3H_6O) + 2-Naphthol ($C_{10}H_8O$)

Skirrow, 1902

%	p
25°	
0	229.6
13.95	213
26.88	195
100	0

Weissenberger, Schuster and Mayer, 1924

mol%	p
18°	
50.00	58
44.44	69
40.00	87
36.34	97
33.33	105
0	163.65

mol%	η	σ
(water = 1)		
18°		
50.00	4.8	0.465
40.00	2.7	0.442
33.33	2.1	0.446
20.00	1.0	0.370
0	0.29	0.315

Rabinovitch, 1940

vol%	(α) magn			B
yellow	green	indigo		5780 Å
20°				
0	7.96	9.02	14.83	0.13
6.8	10.11	11.51	19.79	0.51
14.2	12.49	14.29	25.21	0.94
25.5	15.96	18.37	33.48	1.59

B = Magnetic birefringence

Methylhexylketone ($C_8H_{16}O$) (b.t.=172.85) +

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Phenol	(C_6H_6O)	182.2	68	184.5
o-Cresol	(C_7H_8O)	191.1	85	191.9
o-Chlor-phenol	(C_6H_5OCl)	176.8	65	187.0
o-Brom-phenol	(C_6H_5OBr)	198.5	100	194.8

Diisobutylketone ($C_9H_{18}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	168.0
80	183.4 Az
100	182.2

Methylheptenone ($C_8H_{14}O$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	173.2
67	184.6 Az
100	182.2

Methylheptenone ($C_8H_{14}O$) + Cresol-o (C_7H_8O)

Lecat, 1949

%	b. t.
0	173.2
85	192.9 Az
100	191.1

Phorone (C ₉ H ₁₄ O) (b.t.=197.8) + Phenols. Lecat, 1949					Hudlicky, 1949		
2 nd comp.			Az		%	n _D	η
Name	Formula	b. t.	%	b. t.	25°		
Phenol	(C ₆ H ₆ O)	182.2	18	198.8	0	1.4482	1850
o-Cresol	(C ₇ H ₈ O)	191.1	35	201.3	10	1.4582	2020
m-Cresol	(C ₇ H ₈ O)	201.7	55	206.0	20	1.4682	2240
p-Cresol	(C ₇ H ₈ O)	202.2	55	206.5	100	1.5509	8500
Acetonyl acetone (C ₆ H ₁₀ O ₂) + m-Cresol (C ₇ H ₈ O)					Menthone (C ₁₀ H ₁₈ O) + Thymol (C ₁₀ H ₁₄ O)		
Othmer, Savitt and al., 1949 (fig.)					Lecat, 1949		
mol% (b.t.)					%	b. t.	
L		V			0	209.5	
20		6			92	233.2 Az	
40		21			100	232.9	
60		55					
65		65					
80		87					
Acetonyl acetone (C ₆ H ₁₀ O ₂) + p-Cresol (C ₇ H ₈ O)					Menthone (C ₁₀ H ₁₈ O) + Carvacrol (C ₁₀ H ₁₄ O)		
Othmer, Savitt and al., 1949 (fig.)					Brauer, 1929		
mol% (b.t.)					%	mol%	b. t. (10mm)
L		V			0	0	82.0
20		7			20	20.2	87.0
40		23			50	50.6	103
60		35			80	80.3	111
68		68			100	100	113
80		87					
Cyclohexanone (C ₆ H ₁₀ O) + Phenol (C ₆ H ₆ O)					Camphor (C ₁₀ H ₁₆ O)(b.t.=209.1) + Phenols		
Lang, 1912 and Schmidlin and Lang, 1912					Lecat, 1949		
%	f. t.	%	f. t.	2 nd Comp.			
11.0	-72	59.9	-30.5	Name	Formula	b. t.	Az
18.0	-66	65.0	-36.2	o-Cresol	C ₇ H ₈ O	191.1	15 209.85
28.2	-42	69.6	-13	m-Cresol	C ₇ H ₈ O	202.2	35 213.35
34.6	-30	74.0	0	p-Cresol	C ₇ H ₈ O	201.7	30.5 213.15
43.2	-24	74.9	+2.3	o-Xylenol	C ₈ H ₁₀ O	226.8	73 227.5
46.1	-22.5	76.9	+8.3	m-Xylenol	C ₈ H ₁₀ O	210.5	50 217.0
49.8	-23	78.3	+12.3	Thymol	C ₁₀ H ₁₄ O	232.9	84 233.3
50.4	-23	87.5	+27.8	p-Chlorphenol	C ₆ H ₅ OC1	219.75	75 227.5
53.6	-24.1	100	+42	o-Bromphenol	C ₆ H ₅ 0Br	216.5	40 216.5

CAMPHOR + CRESOL

519

Camphor ($C_{10}H_{16}O$) + Phenol (C_6H_6O)

Kremann, Wischo and Paul, 1915

%	f.t.
100	+40
98.5	+38
93.5	+35
88.1	+32
81.7	+26.5
77.3	-22
70.8	+14
63.8	- 2
60.3	-12
21.1	-48
15.3	+92
11.0	119
6.3	147
0	173

Wood and Scott, 1910

%	f.t.	%	f.t.
100	40.3	38.49	-20.0
97.68	39.0	37.79	-18.7
95.49	37.5	35.88	-19.0
93.13	36.1	33.36	-19.3
90.58	34.2	32.47	-16.7
85.14	29.7	32.26	-20.1
79.69	25.0	30.68	-15.9
78.36	22.0	29.83	-26.4
75.90	19.0	28.52	-13.8
74.60	16.1	27.76	- 0.1
71.43	10.5	26.63	+29.5
71.08	7.9	23.42	50.7
69.69	5.0	20.27	67.5
67.36	2.4	18.93	77.0
65.50	- 3.0	17.81	80.0
61.43	-15.7	15.28	88.0
60.48	-22.5	11.14	112.0
59.65	-28.0	9.35	128.0
57.57	-25.7	7.45	140.0
55.10	-23.6	5.94	151.0
50.01	-20.4	4.02	158.0
47.48	-22.64	0	174.5
44.20	-20.0		
41.27	-19.0		

E : -30.5

E : -32.0

(1 + 1)

f.t. = -18.6°

Gunther and Peiser, 1927

%	f.t.	%	f.t.
0.0	+178	42.0	-15.0
16.0	+ 86	46.0	-18.2
26.0	+ 3.0	49.9	-22.5
30.0	- 12.5	50.0	-21.5
31.8	- 16.5	50.8	-24.5
34.0	- 15.5	52.1	-27.1
36.8	- 15.2	53.5	-32.3
38.4	- 13.7	65.0	- 7.2
38.8	- 15.5	75.0	+15.7
39.0	- 15.8	100.0	+39.5
41.0	- 15.5		

(1 + 1)

%	d	%	d
15.8°			
0.0	0.8110	45.0	1.0080
26.0	.9952	49.8	.0106
32.7	.9988	52.8	.0130
34.0	1.0011	56.0	.0149
40.0	.0039	100.0	.0596
43.9	.0077		

%	n_D	%	n_D
18°			
69.5	1.5274	44.4	1.5082
64.5	1.5239	43.0	1.5072
59.1	1.5199	42.0	1.5064
53.9	1.5156	41.0	1.5058
48.9	1.5116	39.7	1.5049
47.0	1.5105	38.4	1.5039
46.0	1.5095	34.0	1.5000
45.8	1.5094	28.2	1.4951
45.0	1.5091		

Pariaud, 1951 (fig.)

mol %	(α) _D
17°	
33.3	39.30
50	34
66.7	25
75	18.30
79	15.20

Camphor ($C_{10}H_{16}O$) + Pyrocatechol ($C_6H_6O_2$)

Efremov, 1913

%	f.t.	E	min.
0.0	178	-	-
3.0	165.0	-	-
5.0	147.7	-19.0	7
7.5	136.2	-18.5	8.5
10.0	110.1	-19.0	20
15.5	70.5	-20.0	44
19.4	35.1	-19.0	64
22.0	18.5	-19.0	84
25.0	-3.2	-20.0	108
26.0	-16.8	-19.0	125
28.0	-14.0	-19.0	123
30.0	-6.1	-19.0	104
35.0	+6.5	-19.0	69
37.5	10.1	-18.5	43
40.0	11.3	-19.0	21
42.0	11.5	-	-
44.2	10.0	7.5	20
47.2	12.1	7.5	75
50.0	23.5	8.0	64
52.5	36.2	7.5	53
60.0	58.9	7.5	35
65.0	71.4	7.5	26
70.0	80.6	7.5	16
74.3	86.0	7.5	9
80.0	93.2	8.0	-
85.0	97.5	-	-
90.0	100.9	-	-
95.0	103.0	-	-
100.0	104.0	-	-

(1+1)

Kremann and Odelga, 1921

%	f.t.	%	f.t.
0	175.0	36	4.0
1.8	170.0	37.1	-
3.9	161.5	38.7	-
6.8	150.0	40.4	0.0
11.3	131.6	41.5	12.0
15.3	110.0	41.8	25.5
20	73.5	42.9	28.9
22.4	54.0	45.3	38.5
22.8	50.0	46.9	44.0
23.9	43.0	48.9	52.0
25.2	31.0	50.7	56.5
25.3	26.0	54.3	68.0
26.4	26.0	56.4	71.0
27.4	8.5	61.7	76.5
28.9	8.5	65.3	81.5
29.7	8.5	69.5	85.5
31.2	8.5	73.6	88.5
32.4	7.0	78.5	92.0
34.7	6.5	87	97.5
35	6.0	100	102.5
35.5	4.0		

(2 + 1)

Camphor ($C_{10}H_{16}O$) + Resorcinol ($C_6H_6O_2$)

Czille, 1909

%	f.t.	%	f.t.
0	175	43.5	25 E
20	50	60	77
24.5	+1.5 E	80	97
40	28	100	108
41.9	28.5		

(1+1)

Efremov, 1913

%	f.t.	E	min.
0.0	178	-	-
3.0	165.0	-	-
5.0	147.3	1.0	8
7.5	136.0	1.0	18
10.0	110.0	0.0	55
12.5	93.2	1.0	71
15.5	75.0	1.5	105
19.4	47.0	1.0	143
22.0	30.0	1.0	161
25.0	11.2	1.0	214
26.6	1.0	-	240
28.0	5.9	-	216
30.0	16.0	1.0	184
32.0	15.8	1.0	162
35.0	22.1	1.5	103
37.5	26.0	1.0	72
40.0	28.0	1.0	24
41.2	29.0	1.0	-
42.0	29.0	-	-
43.1	28.1	-	-
44.2	26.2	24.0	18
44.5	-	24.0	72
47.2	36.1	24.0	65
50.0	47.0	23.5	60
52.5	58.2	24.0	53
60.0	76.5	25.0	41
65.0	87.3	24.5	30
70.0	93.1	23.5	23
74.3	100.0	24.0	17
80.0	105	24.0	6
85.0	110.1	-	-
90.0	114.5	-	-
95.0	117.0	-	-
100.0	119.0	-	-

(1+1)

Kremann, Wischo and Paul, 1915

%	f.t.	%	f.t.
0	173	44	23.0
35	20.5	45	24.8
38.5	22.8	47.1	33.8
41.0	24.3	51.8	52.0
42	25.3	100	109
43.2	25.0		

(1 + 1)

Eisenlohr and Meier, 1938

mol%	f. t.	E
100	120	-
70	92	27
57	52	27
50	29	-
48	29.5	19
40	21	0
36	11	0
31	-	0
25	50	0
0	170	-

Camphor ($C_{10}H_{16}O$) + Hydroquinone ($C_6H_6O_2$)

Efremov, 1913

%	f. t.	tr. t.	min.	E	min.
0.0	178.0	-	-	-	-
3.0	165.1	-	-	50	-
5.0	154.2	-	-	49.0	11
7.5	145.0	-	-	49.0	17
10.0	128.0	-	-	49.0	36
12.5	117.1	-	-	49.0	48
15.5	104.3	-	-	49.0	65
19.4	84.0	-	-	50.0	103
22.0	71.2	-	-	50.0	120
25.0	56.1	-	-	50.0	143
26.6	49.1	-	-	-	162
28.0	56.1	-	-	49.0	133
30.0	62.1	-	-	49.0	104
33.0	77.5	61.5	14	49.0	67
35.0	90.0	62.0	29	49.0	43
37.5	98.1	62.0	43	51.0	30
40.0	106.1	62.0	57	49.0	68
42.0	111.1	62.0	70	-	12
45.0	119.5	62.0	42	-	-
47.0	124.5	62.0	35	-	-
49.0	127.7	62.0	27	-	-
50.0	129.0	62.0	-	-	-
52.5	133.1	62.0	17	-	-
57.5	139.8	62.0	-	-	-
59.2	141.5	62.0	-	-	-
60.0	142.6	62.0	-	-	-
62.5	145.1	-	-	-	-
65.0	148.1	-	-	-	-
68.5	150.8	-	-	-	-
70.0	152.6	-	-	-	-
74.3	156.2	-	-	-	-
80.0	160.0	-	-	-	-
85.0	163.4	-	-	-	-
90.0	166.0	-	-	-	-
92.5	167.5	-	-	-	-
95.0	168.3	-	-	-	-
100.0	169.0	-	-	-	-

Kremann and Odelga, 1921

%	f. t.	%	f. t.
0	175.0	41.6	118.1
3.8	161.0	44.3	124.0
7.7	147.0	47.9	126.0
10.8	132.0	50.3	133.0
16.7	106.0	54.8	139.0
20.5	81.0	60.0	143.5
22.7	64.5	64.4	146.0
25.4	32.0	69.1	151.0
27.9	52.0	75.8	153.5
28.9	69.0	81.7	158.0
31.3	79.0	86.7	161.5
35.5	103.0	93.2	165.0
38.8	110.0	100	169.0

Camphor ($C_{10}H_{16}O$) + Pyrogallol ($C_6H_6O_3$)

Jouniaux, 1912

mol%	f. t.	E
0	178	-
10	144.8	-
20	111	-
30	30	17.6
35	35	21
40	50	-
50	73	-
60	93	-
70	108	-
80	118.8	-
90	125.8	-
91.3	126.2	-
100	130.8	-
31 E	-	21

Kremann and Odelga, 1921

%	f. t.	%	f. t.
0	175.0	39.8	47.0
1.3	165.0	44.7	69.0
6.9	153.0	48.1	79.0
11.5	137.0	52.5	89.0
17.2	115.0	57.8	98.0
20.1	88.0	63.2	107.0
22.6	75.0	68.5	110.5
24.1	61.0	75.3	115.2
25.6	53.0	78.4	117.1
27.2	39.0	81.3	118.3
28.6	19.0	89.2	119.5
29.5	15.5	93.6	124.2
33.6	13.0	100	126.0

Camphor ($C_{10}H_{16}O$) + Salol ($C_{13}H_{10}O_3$)

Caille, 1909 (fig.)

%	f.t.
0	175
20	132
40	67
56	6
60	11
80	28
100	42

Le Fevre and Webb, 1931

%	f.t.	%	f.t.
0	175	52.5	8.8
7.0	147.0	57.8	8.75
13.5	145.4	60.9	9.0
21.4	98.0	61.75	11.0
37.7	8.6	62.10	12.40
47.8	6.9	85.80	30.8
50.1	8.6	100	42.5

Camphor ($C_{10}H_{16}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Efremov, 1916 and 1919

mol%	%	f.t.	E	min.
0	0	178.0	-	-
3.27	3.0	168.0	4.1	4
5.44	5.0	161.3	11.3	8
10.83	10.0	145.7	11.1	18
21.47	20.0	111.6	11.3	28
26.69	25.0	93.1	11.3	38
31.91	30.0	74.6	11.3	46
37.04	35.0	51.9	11.3	57
42.16	40.0	25.0	11.8	62
47.20	45.0	12.6	11.8	70
52.23	50.0	15.2	12.2	58
57.44	55.0	19.6	12.4	50
62.64	60.0	22.4	11.8	40
67.24	65.0	25.6	11.8	34
71.84	70.0	30.3	11.8	24
81.39	80.0	35.2	11.8	13
90.77	90.0	40.2	11.3	4
95.39	95.0	42.2	-	-
97.25	97.0	43.5	-	-
100	100	45.0	-	-

E : 45.5 mol% - 11.8°

Kremann and Odelga, 1921

%	f.t.	%	f.t.
0	175.0	48.2	17.0
4.2	165.0	51.3	18.7
9.4	151.0	53.5	22.0
13.8	139.0	55.5	22.0
19.7	119.0	60.5	25.0
22	110.0	68.5	30.0
24	102.0	75.1	33.5
31.1	75.0	78.9	35.5
34.4	62.0	84.5	38.5
39.2	42.0	88.1	40.0
43.1	26.0	92.7	42.0
44.3	17.0	100	44.5
46.6	16.0		

Camphor ($C_{10}H_{16}O$) + m-Nitrophenol ($C_6H_5O_3N$)

Efremov, 1916 and 1919

%	mol%	f.t.	%	mol%	f.t.
0	0	178.0	44.30	46.51	33.1
4.60	5.0	165.6	44.84	47.07	37.8
9.22	10.0	148.6	46.07	48.29	38.1
18.60	20.0	105.2	47.76	50.00	43.0
20.12	21.60	100.9	49.92	52.15	48.0
25.01	26.71	81.6	54.08	56.30	55.7
28.15	30.0	72.6	60.07	62.19	66.2
30.24	32.14	63.8	67.34	69.30	76.5
33.98	36.01	44.9	75.41	77.03	82.6
35.60	37.67	33.6	79.48	80.91	86.5
38.00	40.13	24.1	85.34	86.42	90.5
39.89	42.05	17.5	92.30	92.92	93.7
43.16	45.36	30.3	100	100	95.5

E : 41.5 mol% 16°

Kremann and Odelga, 1921

%	f.t.	%	f.t.
0	175.0	54.9	66.0
3	169.0	56.7	70.0
6.5	158.0	59.9	73.2
10.8	138.5	62.4	75.8
17.9	102.0	66.3	80.5
22.9	60.0	70.9	84.0
25	52.0	75.7	86.2
26.3	60.0	79.1	88.0
29.3	10.0	84.8	90.2
31.1	10.0	90.4	92.0
41.3	12.0	94.4	93.5
45.2	39.0	97.6	94.2
46.9	44.0	100	94.8
48.1	48.0		

Camphor ($C_{10}H_{16}O$) + p-Nitrophenol ($C_6H_5O_3N$)

Efremov, 1916 and 1919

%	mol%	f. t.	%	mol%	f. t.
0	0	178.0	49.88	47.65	48.2
3.0	2.95	169.8	54.96	52.76	58.5
5.0	4.60	166.0	60.0	57.83	68.0
10.0	9.22	149.6	64.90	62.85	77.3
15.0	13.91	125.9	70.0	68.08	81.3
20.0	18.60	104.9	75.0	73.31	88.3
25.51	23.85	76.2	80.0	78.53	94.0
30.13	28.29	38.5	90.0	89.17	107.2
33.00	31.30	17.7	95.0	94.56	111.0
40.95	38.82	20.6	97.0	96.73	112.3
43.12	40.94	29.9	100	100	114.1
44.96	42.76	33.4			

E : 36 mol% -2°

Kremann and Odelga, 1921

%	f. t.	%	f. t.
0	175.0	50.3	49.5
5.4	159.0	52.5	56.0
13.1	133.0	56.3	63.0
20.3	92.0	57.4	66.5
25	64.0	58.3	67.5
26.6	46.0	61.0	73.0
27.4	43.0	61.9	75.0
31.0	-9.0	67.5	83.0
39.6	-6.0	70.8	87.5
40	-5.0	73.7	90.7
40.3	-4.0	80.8	99.0
40.9	0.0	90.5	106.5
43.4	+22.0	95.1	110.0
45.4	27.0	100	112.5

Camphor ($C_{10}H_{16}O$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Efremov, 1919

mol%	%	f. t.	E
0	0	178.0	-
3.0	3.38	168.2	48.3
5.0	5.98	161.5	61.0
10.0	11.85	145.2	67.3
15.0	17.54	128.6	69.2
20.0	23.23	114.0	69.2
25.0	28.70	93.8	69.5
30.0	34.16	69.7	-
35.0	39.41	72.2	69.3
40.0	44.66	75.1	69.2
50.0	54.76	79.2	69.3
60.0	64.48	84.9	69.5
70.0	73.85	90.8	69.5
75.0	78.34	94.5	69.3
80.0	82.83	96.7	69.5
90.0	91.60	102.6	67.2
95.0	95.83	106.6	-
97.0	97.50	107.9	-
100.0	100.0	111.4	-

E : 30.7 mol% - 69.3°

Kremann and Odelga, 1921

%	f. t.	%	f. t.
0	175.0	46.6	79.0
2.3	171.2	52.5	82.5
7.1	161.0	57.6	87.0
11.9	149.5	62.9	89.5
18.5	133.0	67.6	92.5
25	111.5	75.5	95.5
31.4	92.0	81.9	100.0
37.6	71.0	86.1	102.0
40.1	70.0	92.6	105.5
40.4	69.0	97.9	109.0
40.7	71.5	100	110.5

Camphor ($C_{10}H_{16}O$) + Picric acid ($C_6H_3O_7N_3$)

Efremov, 1916 and 1919

mol%	%	f. t.	E
0	0	178.0	-
3.0	4.45	168.3	-
5.0	7.34	162.0	58.2
10.0	14.34	145.1	63.5
15.0	20.85	125.8	64.7
20.0	27.36	106.1	66.4
25.0	33.33	86.5	66.4
30.0	39.23	67.7	-
35.0	44.66	69.7	66.4
40.0	50.08	74.3	66.4
45.0	55.09	78.2	66.4
50.0	60.10	83.0	66.4
55.0	64.71	88.6	66.4
60.0	69.32	92.5	66.4
70.0	77.85	100.5	67.3
80.0	85.76	107.2	66.4
90.0	93.13	113.9	63.7
95.0	96.62	118.0	60.3
97.0	97.98	120.0	-
100	100	121.4	-

E : 30.5mol% 66.4°

Kremann and Odelga, 1921

%	f. t.	%	f. t.
0	175.0	56.0	93.3
4.5	169.0	60.1	96.0
11.5	155.0	74.4	104.0
11.8	132.0	80.5	107.5
28.2	104.0	83.5	110.0
35.5	84.0	89.4	113.5
39.4	71.0	93.5	117.0
43.4	80.0	96.1	119.0
47.3	85.5	100	122.5
51.5	89.0		

Camphor ($C_{10}H_{16}O$) + 3-Nitropyrocatechol
($C_6H_5O_4N$)

Efremov, 1916 and 1919

%	mol%	f. t.	E
0	0	178.0	-
4.23	4.15	176.1	-
10.45	10.27	150.4	-
15.11	14.86	135.9	-
21.17	20.84	116.8	26.1
24.97	24.61	100.4	25.8
29.71	29.30	80.3	26.0
35.00	34.56	50.1	25.9
37.30	36.84	30.0	-
39.93	39.46	31.2	25.8
44.90	44.41	39.8	25.8
50.00	49.54	47.1	26.1
54.95	54.46	53.2	26.1
60.0	59.53	58.3	25.9
69.96	69.54	66.2	26.1
80.06	79.75	72.0	-
88.78	88.59	77.6	-
95.03	94.94	80.9	-
100	100	83.8	-

E : 38gr% 25.8°

Camphor ($C_{10}H_{16}O$) + 2-Nitroresorcinol ($C_6H_5O_4N$)

Efremov, 1916 and 1919

%	mol%	f. t.	E
0	0	178.0	-
3.25	3.18	168.4	-
5.00	4.91	163.8	-
11.23	11.12	147.1	46.6
15.03	14.75	135.1	46.5
22.16	21.82	114.0	46.6
33.50	33.13	75.1	46.3
33.91	33.47	73.4	46.3
37.97	37.51	52.2	46.3
41.90	41.42	48.9	46.3
44.26	43.70	51.2	46.3
50.80	50.31	56.3	46.3
56.51	56.02	60.2	46.5
59.70	59.23	62.6	46.4
70.50	70.09	69.0	46.3
80.04	79.69	72.9	46.4
90.05	89.82	79.0	46.4
96.66	96.59	83.5	-
100	100	84.6	-

E : 39.3mol% 46.3°

Camphor ($C_{10}H_{16}O$) + Nitrohydroquinone ($C_6H_5O_4N$)

Efremov, 1916 and 1919

%	mol%	f. t.	E
0	0	178.0	-
6.32	6.21	160.4	-
7.99	7.85	156.3	-
13.20	12.97	139.6	-
17.50	17.22	121.8	-
23.49	23.15	96.8	26.9
27.24	26.88	70.8	26.5
30.29	29.37	48.7	26.4
32.68	32.25	30.6	26.4
34.43	33.96	31.3	26.4
39.94	39.45	52.9	26.5
45.21	44.71	67.1	26.5
50.36	49.88	78.8	26.5
55.97	55.17	88.9	26.5
60.00	59.53	95.7	26.7
70.57	70.14	110.2	-
80.02	79.67	118.4	-
90.00	89.77	125.0	-
94.98	94.84	128.4	-
100	100	131.3	-

E : 33.2 mol% 26.4°

Camphor ($C_{10}H_{16}O$) + 2,4-Dinitroresorcinol
($C_6H_4O_6N_2$)

Efremov, 1916 and 1919

%	mol%	f. t.	E
0	0	178.0	-
3.10	2.37	170.3	-
5.37	4.17	162.5	-
10.02	7.80	150.0	-
15.51	12.36	132.6	-
20.01	15.96	117.1	48.6
25.11	20.31	100.0	47.2
30.02	24.57	77.8	47.3
34.94	28.98	47.2	-
37.51	31.32	61.4	47.2
39.54	33.24	82.1	47.2
45.02	37.77	96.0	47.2
50.10	43.28	106.6	47.2
59.83	53.09	118.4	47.5
69.97	63.93	125.2	-
80.08	75.25	132.4	-
86.37	82.81	136.6	-
94.98	93.52	140.8	-
100	100	142.7	-

E : 29 mol% 47.2°

Camphor ($C_{10}H_{16}O$) + 2,4,6-Trinitroresorcinol
($C_6H_3O_6N_3$)

Efremov, 1916 and 1919

mol%	%	f. t.	E
0	0	178.0	-
3.0	4.74	168.7	-
5.0	7.82	163.8	62.3
10.0	15.19	143.2	73.6
15.0	21.96	124.5	80.0
20.0	28.72	101.9	82.6
25.0	34.79	81.8	-
30.0	40.85	89.1	82.6
35.0	46.33	98.6	82.6
40.0	51.80	106.0	82.6
45.0	56.76	114.1	82.6
50.0	61.71	120.2	82.6
55.0	66.22	128.5	82.6
60.0	70.74	136.0	82.6
70.0	79.00	145.9	80.0
80.0	86.57	157.1	82.3
90.0	93.55	166.9	-
95.0	96.84	171.6	-
97.0	98.12	173.6	-
100	100	175.5	-

E : 25.3 mol% 82.6°

Camphor ($C_{10}H_{16}O$) + 1-Naphthol ($C_{10}H_8O$)

Caille, 1909

%	f. t.
0	+175
36 E	-15
100	+96

Camphor ($C_{10}H_{16}O$) + 2-Naphthol ($C_{10}H_8O$)

Caille, 1909

%	f. t.
0	175
34 E	13
100	132

Kremann, Wischo and Paul, 1915

%	f. t.	%	f. t.
0	173	49.8	53.0
7.7	150	55.6	65.0
13.5	130	61.1	76.0
24.7	83	66.6	87.5
29.7	37	75.7	97.0
36.8	11.0	85.4	105.8
42.7	25	93.4	111.5
44.4	36.0	100	117
48.3	48		

Menthenone ($C_{10}H_{16}O$) + Thymol ($C_{10}H_{14}O$)

Brauer, 1929

%	mol%	b. t. (10mm)
0	0	103.0
20	20.2	106.6
50	50.4	116.5 Az
80	80.2	114.0
100	100	109.0

Lecat, 1949

%	b. t.
0	222.4
75	236.5 Az
100	232.9

Menthenone ($C_{10}H_{16}O$) + Carvacrol ($C_{10}H_{14}O$)

Brauer, 1929

%	mol%	b. t. (10mm)
0	0	103
10	10.1	106.5
30	30.1	114.0
50	50.3	118.3
70	70.2	119.1 Az
90	90.1	116.5
100	100	112.7

Lecat, 1949

%	b. t.
0	222.4
75	239.5 Az
100	237.85

Menthenone ($C_{10}H_{16}O$) + Eugenol ($C_{10}H_{12}O_2$)

Brauer, 1929

%	mol%	b. t. (10mm)
0	0	103
10	9.4	105.2
30	28.4	110.0
50	48.1	114.2
70	68.3	118.0
90	89.2	120.7
100	100	122.5

Pulegone ($C_{10}H_{16}O$) (b. t. = 223.6) + Phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
p-Cresol	C_7H_8O	201.7	97	224.2
Pyrocatechol	$C_6H_6O_2$	245.9	90	246.5
Thymol	$C_{10}H_{14}O$	232.9	65	235.3
Carvacrol	$C_{10}H_{14}O$	237.85	78	238.4

Pulegone ($C_{10}H_{16}O$) + Carvacrol ($C_{10}H_{14}O$)

Brauer, 1929

%	mol %	b. t. (10mm)
0	0	94.6
10	10.1	97.0
30	30.1	100.5
50	50.3	112
70	70.2	115 Az
90	90.1	114
100	100	113

Fenchone ($C_{10}H_{16}O$) + Phenol (C_6H_6O)

Kremann and Dietrich, 1923

%	f. t.
100	41
86.9	35
81.4	29
68.2	4
50.2	-14
38	1.7
9.2	-2
0	5.3

Lecat, 1949

%	b. t.
0	193.6
25	196.2 Az
100	182.2

Fenchone ($C_{10}H_{16}O$) + Cresol-p (C_7H_8O)

Lecat, 1949

%	b. t.
0	193.6
72	205.5 Az
100	201.7

Fenchone ($C_{10}H_{16}O$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f. t.
100	103.5
89.1	98.5
76.1	91.5
69.7	80.5
55.3	68
47.5	50
40.1	-5
8.0	-3
0	+5.3

Fenchone ($C_{10}H_{16}O$) + Resorcinol ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f. t.
100	115
84.9	103
72.5	92
63	80.5
54.8	68
46.4	49
12.0	-8.3
7.3	-2.5
0	5.3

Fenchone ($C_{12}H_{16}O$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
0	5.3	44.3	134
4.8	0	52.6	143
18.8	34	62.9	154
20.2	48	74.8	161
20.9	52	84.7	166.2
23.6	77	92.6	168
28.6	102	100	169
30.8	107		
31.8	109		

Fenchone ($C_{10}H_{16}O$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	131	45.9	75
91.9	125.2	39.9	62.6
79.8	115	35.6	45
68.9	104.3	11.4	-2.5
59.9	94	4.5	2.5
52.7	84	0	5

Fenchone ($C_{10}H_{16}O$) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	44.5	52.5	20
93.1	41.5	43.1	13.5
83.9	36.5	33.3	6
73.0	31.8	8.0	1.5
60.3	24.7	0	5.3

Fenchone ($C_{10}H_{16}O$) + p-Nitrophenol ($C_6H_5O_2N$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	115	45.1	30
92.6	109	43.5	23
81.7	100.5	43.3	22
73.5	91.5	42.9	21.0
65.5	83	38.1	-6
58.7	72	12.6	-2.8
53.1	56	4.1	+3.5
48.4	44	0	+5.3

Fenchone ($C_{10}H_{16}O$) + 1,2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	111	47.3	81.7
94.1	108	42.4	76.
87.5	106	31.0	57.5
72.6	98.5	22.4	41.5
65.4	94	12.1	9
59.6	90	4.5	+2.5
52.8	85.5	0	+5.3

Fenchone ($C_{10}H_{16}O$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	121.3	49.7	96.5
95.3	119.5	46.9	94
87.9	116.5	39.8	88
76.9	111.5	32.6	76
75.2	100.5	25.6	60
65.4	106	16.1	27
65.2	106	10.9	3.5
56.8	101	5.5	3.3
52.6	98.5	0	5.3

E = 0°

Fenchone ($C_{10}H_{16}O$) + 1-Naphthol ($C_{10}H_8O$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	95.0	46	60.5
92.5	89.5	45.4	60.5
83.6	81.5	43	60
70.9	66	38.9	58.5
70.8	66.5	35.9	56
65.5	59.3	33.1	53
61.8	55	31.8	52
60.6	56	26.0	45
59	57	18.1	29
56.1	59	11.6	13
54.4	59	5.0	3.2
50	60.5	0	5.3
51.9	60.0		

(1+1)

Fenchone ($C_{10}H_{16}O$) + 2-Naphthol ($C_{10}H_8O$)

Kremann and Dietrich, 1923

%	f. t.	%	f. t.
100	121	36.4	16
97.6	119.5	35.4	15
89.2	113.1	32	10
79.6	104	31.9	10
70.7	93	28.1	4.7
61.9	81.5	25	6
54.4	65.2	21.7	-5
51.7	55	17.5	-7.5
50	50	14.2	-5
48.3	46.6	10	-1.5
43.6	23	5.7	+2
42.5	22	1.7	+3.8
40.8	21	0	+5.3
39.9	19.5		

(1+1)

 E_1 : 23° E_2 : 9.8°Carvone ($C_{10}H_{14}O$) (b. t. = 231.0) + Phenols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Sat. t.
Thymol	$C_{10}H_{14}O$	232.9	52	238.5	-10
Carvacrol	$C_{10}H_{14}O$	237.85	58	242.2	-
Pyrocatechol	$C_6H_6O_2$	245.9	72	248.1	-
p-Chlorphenol	C_6H_5OCl	219.75	45	238.3	-

Carvone ($C_{10}H_{14}O$) + Carvacrol ($C_{10}H_{14}O$)

Brauer, 1929

wt %	mol %	b. t.
10 mm		
0	0	101
10	10	102
30	30	109
50	50	115
70	70	116.5 Az
90	90	115.3
100	100	113

Carvenone ($C_{10}H_{16}O$) (b. t.=234.5) + Phenols.

Lecat, 1949

2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	
Thymol	($C_{10}H_{14}O$)	232.9	50	241.0	
Carvacrol	($C_{10}H_{14}O$)	237.85	55	243.0	

Acetophenone (C_8H_8O) (b. t.=202.0) + Phenols.

Lecat 1949

2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Phenol	(C_6H_6O)	182.2	7.8	202.2	-
Cresol-o	(C_7H_8O)	191.1	25	203.75	-
Cresol-m	(C_7H_8O)	202.2	47.2	208.45	+5.5
Cresol-p	(C_7H_8O)	208.4	46.5	202.7	-
Xylenol-m	($C_8H_{10}O$)	210.5	70	213.0	-
Ethyl-phenol-p	($C_8H_{10}O$)	228.8	85	219.5	-
Guaiacol	($C_7H_8O_2$)	205.05	67.5	202.25	-
Chlorphenol-o	(C_6H_5OCl)	176.8	-	204.5	-
Chlorphenol (-p)	(C_6H_5OCl)	219.75	85	224.5	-
Bromphenol -o	(C_6H_5OBr)	198.5	52	212.5	-

Acetophenone (C_8H_8O) + Phenol (C_6H_6O)

Kremann and Marktl, 1920

%	f. t.	%	f. t.
100	41.0	55.5	-36.0
95.3	38.0	49.3	-44.0
88.8	33.3	46.3	-35.0
85.6	30.1	39.1	-19.0
82.2	25.7	29.8	-3.9
77.5	21.0	22.8	+2.6
72.7	15.0	13.4	11.5
67.4	7.5	4.7	18.2
61.8	-9.5	0	20.5

Lestrade, 1952

%	f. t.	E
100	40	-
80	11	-47
70	-2	-47
60	-12	-47
50	-46	-47
40	-22	-30
30	-29	-30
20	+2	-30
0	20	-
(1+1)		

Taboury and Lestrade, 1947

Raman spectra in the L

Acetophenone (C_8H_8O) + Thymol ($C_{10}H_{14}O$)

Lestrade, 1952

%	f. t.	E
0	20	-
35	10	-12
45	2	-12
50	-5	-12
60	-7	-21
73	-6	-21
80	-14	-21
100	+51	-
(1+1)		

Acetophenone (C_8H_8O) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Marktl, 1920

%	f. t.	%	f. t.
0	20.5	42.3	6.0
3.4	18.8	47.8	29.0
7.8	16.6	51.6	43.0
14.3	12.5	52.6	44.8
20.2	6.8	56.1	53.0
23.8	+1.5	59.6	44.8
27.5	-0.3	67.5	76.2
28.1	-2.0	74.6	84.2
32.0	-1.0	83.2	92.0
34.1	+0.5	88.9	95.8
36.2	+0.5	95.6	99.7
39.0	0.5	100	102.0
39.8	0.9		

(1 + 1) E : 39% -1.3°

Acetophenone (C_8H_8O) + Resorcinol ($C_6H_6O_2$)

Kremann and Marktl, 1920

%	f. t.	%	f. t.
0	20.5	48.0	27.0
1.7	19.3	49.2	12.5
6.3	17.8	51.8	45.0
14.5	+9.9	56.9	66.5
23.4	-2.1	64.2	77.0
29.9	+1.2	72.9	88.7
34.5	8.3	82.3	97.2
38.9	11.2	91.2	104.0
43.5	12.5	100	109.0
45.8	13.1		

(1 + 1) E : 23.4% -5.5°

Acetophenone (C_8H_8O) + Hydroquinone ($C_6H_6O_2$)

Kremann and Marktl, 1920

%	f. t.	%	f. t.
0	20.5	40.7	112.0
3.4	18.1	43.5	115.2
3.9	18.2	44.2	118.2
8.0	28.5	47.3	121.0
9.2	28.8	51.1	127.0
14.0	35.0	56.2	136.3
15.0	36.3	61.9	141.0
18.4	40.3	65.4	146.0
19.7	41.2	72.5	152.5
22.5	42.9	80.2	157.4
25.6	68.0	86.5	162.0
29.1	78.0	93.7	165.0
31.2	86.0	100	168.2
36.5	102.5		

(1 + 1) E : 8.0% 17.7°

Acetophenone (C_8H_8O) + Pyrogallol ($C_6H_6O_3$)

Kremann and Marktl, 1920

%	f. t.	%	f. t.
0	20.0	40.2	32.0
3.7	19.5	43.1	50.0
8.5	18.0	46.2	55.8
12.1	16.2	49.3	68.0
17.9	11.2	51.4	75.0
20	7.6	56.2	85.8
22.8	4.0	62.8	95.2
23.9	5.2	68.9	103.0
26.6	7.8	77.9	112.0
30.2	11.0	84.2	117.2
33.7	15.5	91.6	122.0
37.4	19.5	100	120.0

(1 + 1) E : 43.1% 21.0°

Acetophenone (C_8H_8O) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.
0	20.2	-	50.2	6.0
5.2	18.0	-	55.0	11.4
13.2	15.0	-	59.5	16.2
18.5	12.5	-	65.8	22.0
23.4	-	2.5	72.4	27.0
28.9	9.1	2.3	79.3	32.0
36.5	-	2.5	87.8	37.8
40.7	-	2.3	94.3	41.0
45.8	4.2	1.8	100	44.5

Acetophenone (C_8H_8O) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Marktl, 1920

%	f.t.	%	f.t.
0	+20.5	53.3	+30.5
10.1	15.5	57.1	40.0
17.8	11.2	63.9	56.0
24.3	7.0	70.1	66.5
30.2	+2.0	75.4	73.0
34.4	-3.0	81.7	80.5
38.6	-10.2	92.4	90.5
44.9	-2	100	95.0

Acetophenone (C_8H_8O) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.	E
0	20.5	-	46.0	-	-4.2
6.9	17.8	-	48.0	26.0	-
12.8	14.0	-	56.0	51.5	-
20	9.5	-	62.7	66.0	-
24.4	6.2	-	63.8	67.0	-
30.0	2.0	-	68.3	76.0	-
30.0	+1.8	-4.0	72.2	81.2	-
34.1	-0.8	-	78.8	90.9	-
38.5	0	-	86.7	99.2	-
39.3	7.0	-	94.4	106.6	-
43.3	+16.0	-	100	112.0	-

Acetophenone (C_8H_8O) + 1,2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.
0	20.5	-	49.8	58.0
4.3	19.2	-	56.4	66.8
10.2	16.8	-	61.8	73.6
15.0	14.8	-	67.6	80.0
21.0	12.0	12.0	73.3	85.5
25.3	17.5	11.5	77.3	90.0
29.5	26.5	12.6	82.7	94.8
34.3	33.5	-	87.7	98.9
39.6	41.8	10.8	93.3	104.5
43.5	48.5	-	100	110.0

Acetophenone (C_8H_8O) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.	E
0	20.5	-	55.0	49.9	-
6.3	18.8	-	56.7	50.3	50.0
12.3	-	16.5	59.0	-	50.0
18.0	20.6	16.5	61.4	59.0	-
23.8	28.2	15.9	65.9	67.2	-
29.9	35.0	-	70.8	75.2	-
35.0	39.0	-	77.8	86.0	-
40.0	43.2	-	84.9	96.5	-
45.4	47.2	-	91.2	106.0	-
48.1	48.0	-	100	121.0	-
51.6	49.2	-			

(1 + 1)

Acetophenone (C_8H_8O) + 1-Naphthol ($C_{10}H_8O$)

Kremann and Marktl, 1920

%	f.t.	%	f.t.
0	20.0	48.3	12.5
4.2	19.0	53.4	13.0
12.9	15.5	62.9	42.9
19.1	10.6	71.9	61.8
25.9	6.5	79.4	75.6
34.2	2.5	86.0	82.4
41.8	9.8	95.3	90.8
46.6	11.8	100	93.2

(1 + 1) E : 25.9% 0°

Acetophenone (C_8H_8O) + 2-Naphthol ($C_{10}H_8O$)

Kremann and Marktl, 1920

%	f. t.	E	%	f. t.	E
0	20.0	-	50.6	12.3	-
3.6	18.5	-	50.6	35.0	+8.2
11.2	15.0	-	55.9	51.4	-
20.3	10.5	-	61.2	63.9	-
28.0	6.0	+1.5	67.6	78.0	-
34.9	4.0	-	73.5	88.8	-
40.2	6.0	-	78.3	96.9	-
44.4	7.8	-	85.2	105.5	-
46.2	12.3	-	100	121.5	-
(1 + 1)					

p-Methylacetophenone ($C_9H_{10}O$) + Phenol (C_6H_6O)

Taboury and Lestrade, 1947 (fig.)

%	f. t.
0	+26
10	-36
18	-56 E
20	-50
30	-35
40	-30 (1 + 1)
50	-32
60	-37
65	-42 E
70	-28
80	+2
90	+25
100	+40

Lestrade, 1952

%	f. t.	E
0	+28	-
25	-20	-33
30	-31	-33
43	-22	-37
50	-23	-37
60	-29	-37
68	-30	-37
80	-3	-37
100	+40	-

p-Methylacetophenone ($C_{10}H_{10}O$) (b. t. = 226.35)
+ Phenols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Xylenol-o ($C_8H_{10}O$)		226.8	51	231.35	-
Xylenol-m ($C_8H_{10}O$)		210.5	85	227.0	-
Ethylphe- nol-p ($C_8H_{10}O$)		218.8	30	229.5	-
Thymol ($C_{10}H_{14}O$)		232.9	68	234.9	7.7
Pyrocate- chol ($C_6H_6O_2$)		245.9	87.5	246.3	-
Chlorphe- nol-o (C_6H_5OCl)		219.75	48	235.4	-12

Ethylphenyl ketone ($C_9H_{10}O$) (b. t. = 217.7)
+ Phenols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Cresol-m (C_7H_8O)		202.2	17.2	218.6	3.3
Cresol-p (C_7H_8O)		201.7	16.2	218.5	-
Xylenol-o ($C_8H_{10}O$)		226.8	67	228.5	-
Xylenol-m ($C_8H_{10}O$)		210.5	65	221.0	-
Ethyl- phenol-p ($C_8H_{10}O$)		218.8	-	224.5	-
Thymol ($C_{10}H_{14}O$)		232.9	87	233.2	-
Guethol ($C_8H_{10}O_2$)		216.5	-	218.3	-
Chlor- phenol-p (C_6H_5OCl)		219.75	58	231.0	-

Benzophenone ($C_{13}H_{10}O$) + Phenol (C_6H_6O)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.
0	47	-	51.8	-15
6.80	39	-	53.8	-10
13.53	29	-	55.7	-7.5
14.5	28	-4.5	59.1	0
23.41	11	-	59.4	+1
23.56	9	-	61.8	6.5
27.46	1	-	68.7	16
28	1	-4.5	74.1	25
31.35	-4	-	77.3	27.5
37.78	-4	-	81.0	31
41.11	-3.5	-	87.9	36
45.89	-7.5	-	95.1	39.5
47.3	-24	-	100	40.8
51.05	-15	-		

(1 + 1)

Hrynakowski and Jeske, 1938 (fig.)

%	E	%	E
0	9.55	56	12.95
10	11.3	63	12.5
17	11.45	69	12.5
25	11.8	63	11.5
39	12.3	81	11.3
42	13.0	90	10.3
45	13.2	100	9.7
50	13.45		

at room temperature

Benzophenone ($C_{13}H_{10}O$) + Thymol ($C_{10}H_{14}O$)

Pawlewski 1893 and 1899

mol%	f. t.	mol%	f. t.
0	48.5	23.61	35.0
6.31	45.8	76.85	39.2
12.98	41.2	86.73	44.0
17.99	38.5	89.42	45.7
23.61	35.0	93.75	47.4
		100	49.0

Benzophenone ($C_{13}H_{10}O$) + Pyrocatechol ($C_6H_6O_2$)

Freunlich and Posnjak, 1912

%	f. t.	%	f. t.
0	47	40	48
10	37	50	65.5
20	25	60	77
23	19 E	70	85
24	19.5 (2+1)	80	92
28.5	15 E	90	98.5
30	19	100	105

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47.0	-	48.9	68	-
3.5	43.5	-	59.16	79.5	-
9.3	37.5	11.3	65.02	85.2	-
14.6	31.5	11.3	74.14	91	-
20.5	23.5	-	80.15	95.1	-
28.4	11.6	-	88.73	99.2	-
30.82	17	11.0	92.73	101	-
42.0	53	-	100	103	-
42.55	55	-			

Benzophenone ($C_{13}H_{10}O$) + Resorcinol ($C_6H_6O_2$)

Freunlich and Posnjak, 1912

%	f. t.	%	f. t.
0	47	30	72
10	37	60	84.5
20	22	70	94
21 E	19.5	80	102.5
24 (2+1)	21.5	90	110
34 E	14	100	119
40	51		

Pfeiffer, 1924

%	f. t.	%	f. t.
0	48	46.4	68 - 69
13.0	38	60.5	86
27.0	29 - 30	78.1	99
36.3	50	100	110

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	34.9	34	-
5.12	41.5	-	37.10	41	-
7.90	38.1	-	40.18	54	-7
9.37	35.4	-	41.4	60	-
15.28	26.5	-	46.8	73.5	-
17.72	20.5	-	55.9	87	-
21.96	13	-	60.5	90.8	-
23.4	9	-	68.3	97.4	-
23.36	7.0	-	74.3	100.6	-
27.32	-1	-7	80.3	103.5	-
29.21	-7	-7	85.1	105	-
32.1	12	-7	98	108.5	-
33.49	28.2	-	100	109	-

Benzophenone ($C_{13}H_{10}O$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	25.78	112	-
5.26	43.9	-	32.04	124	-
5.91	43.5	41.1	40.9	137.5	-
9.91	-	41.3	44.35	142	-
10.87	41.3	-	50.6	147.5	-
13.40	-	41.1	55.41	150.5	-
14.96	69	-	67.3	157	-
19.81	95	40.5	72.6	168	-
21.10	99	-	79.1	162.5	-
			100	170.4	-

Benzophenone ($C_{13}H_{10}O$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	29.30	61	-
2.3	45.8	-	34.71	73.5	-
7.07	42.1	-	44.43	90.8	-
8.91	41.5	-	55.5	105	-
11.40	38.4	32.0	67.7	114	-
18.90	33	-	83.1	122.1	-
21.24	39	32.9	100	126	-
29.12	62	-			

Benzophenone ($C_{13}H_{10}O$) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	51.67	20	16
7.05	41	-	52.91	20.6	-
15.36	34.5	-	54.25	21.6	16
24.93	26	-	57.29	23.9	-
29.68	24.3	16	59.1	25	-
32.32	23	-	64.8	28.6	-
36.31	20	-	75.1	34	-
39.63	18.5	16	83.5	38.2	-
42.84	17	16	92.4	42	-
48.46	18	16	97	43.8	-
49.8	19	-	100	45	-
50.11	18.8	-			

Benzophenone ($C_{13}H_{10}O$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	43.37	36	11.5
3.41	44.5	-	47.59	44.5	-
9.72	39	-	53.12	53.7	-
16.23	32	-	55.5	57.5	-
24.3	23	11.5	62.1	67.6	-
33.86	12	-	76.8	83.5	-
37.99	21	-	93.7	93	-
42.04	25	11.5	100	95.8	-

Benzophenone ($C_{13}H_{10}O$) + p-Nitrophenol
($C_6H_5O_3N$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	47	-	44.31	54	17
0	49	-	47.21	60	-
9.26	40.5	-	48.56	63	-
16.45	35.1	16	53.25	71	-
17.03	26	-	53.41	71	-
22.86	29	-	56.50	77	17
31.57	21.2	17	58.47	79	-
37.92	35	-	67.07	88.4	-
40.27	41	-	73.76	94.3	-
42.19	49	-	100	112.7	-

Benzophenone ($C_{13}H_{10}O$) + 1,2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.
0	47.0	-	49.1	70.9
4.6	45.0	-	53.7	75.1
8.5	43.0	-	59.6	80.6
13.5	40.0	-	64.1	84.5
19.3	36.0	35.0	68.4	87.5
22.9	38.0	-	72.7	90.9
27.6	45.0	-	76.9	94.2
31.7	50.0	-	80.7	97.0
35.5	55.5	35.0	86.9	101.0
40.8	60.0	-	94	105.8
47.3	69.0	34.1	100	110.0

Benzophenone ($C_{13}H_{10}O$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.	E
0	47.0	-	47.3	54.5	-
8.2	43.2	-	48.2	59.2	12
13.8	40.0	-	50.5	61.6	-
19.5	36.8	-	53.7	69.5	-
20.0	36.0	-	59.1	80.0	-
23.8	32.8	-	65.0	88.0	-
25.7	30.5	24.8	70.7	93.3	-
29.1	27.2	-	77.5	102.0	-
31.3	27.0	-	82.7	107.0	-
33.0	27.0	-	88.3	112.5	-
37.6	-	-	100	121.0	-
42.0	42.5	27			

E : 23.8% 24.8°
(2 + 1) or (1 + 1)

Pushin and Rikovski, 1930

%	f.t.	E	%	f.t.	E
0.0	47	-	40.5	43	27
12.5	40.5	26	45.5	55	25
24	34.5	-	55.5	75	23
26.5	33	-	65.5	88	21
29	31.5	27.6	74.5	97	-
32	29.5	-	83.5	105.5	-
34	28.5	28.5	92	113.5	-
35	29.5	-	96	117.5	-
36	30.5	27.5	100	121	-
37	35	27.5			

Kofler and Baumeister, 1942 (fig.)

%	t'	%	t
0	53	60	93
10	58	70	103
20	64	80	115
30	70	90	129
40	78	100	145
50	85		

t' = temperature where refractive index for a
red filter = 1.5898

Benzophenone ($C_{13}H_{10}O$) + 1-Naphthol ($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f.t.	E	%	f.t.	E
0	47	-	43.9	38	-
5.97	42.4	-	46	37.8	-
12.80	37.4	-	49.6	-	-
17.5	32	-	49.7	32	-
19.1	31	-	50.8	37	37.1
24.3	26	-	54.9	46	37.1
24.19	26	-	56.2	-	37.1
28.60	-	26.0	58.5	53.5	-
31.3	-	26.0	59.2	53	37.1
34.02	32.9	-	69.4	70.8	-
37.88	35.5	-	81.1	82.2	-
38.3	35.8	-	94.2	90.3	-
42.4	37.8	-	100	93	-

(1 + 1)

Benzophenone ($C_{13}H_{10}O$) + 2-Naphthol ($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f.t.	E	%	f.t.	E
0	47	-	35.59	35.5	19
3.75	44.1	-	43.53	50	-
9.51	39.1	-	49.8	62.51	-
16.27	31.5	-	57.8	17.9	18.5
16.34	31.3	-	71.3	97.2	-
22.45	26.5	18.5	82.3	107.9	-
29.13	-	19.1	96	117.2	-
30.13	19	-	100	121.9	-

Benzil ($C_{14}H_{10}O_2$) + Phenol (C_6H_6O)

Hrynakowski and Staszewski, 1936

%	f.t.	%	f.t.
100	39.9	50	33.0
90	35.9	40	47.5
85	33.9	30	59.0
80	29.9	20	71.0
70	24.4	10	83.5
61	13.5	0	94.7

Benzil ($C_{14}H_{10}O_2$) + Pyrocatechol ($C_6H_6O_2$)

Hrynakowski and Staszewski, 1936

%	f.t.	%	f.t.
100	104.8	40	71.3
90	102.8	35	63.5
80	99.8	30	70.5
70	93.3	20	71.0
60	87.3	10	83.0
50	80.3	0	94.7

Benzil ($C_{14}H_{10}O_2$) + Resorcinol ($C_6H_6O_2$)

Hrynakowski and Staszewski, 1936

%	f.t.	%	f.t.
100	110.9	40	72.9
90	108.0	30	70.0
80	102.4	20	76.0
70	97.9	10	84.0
60	94.4	0	94.7
50	83.9		

Benzil ($C_{14}H_{10}O_2$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Kofler, 1948

E : 37% 69°

Benzalacetone ($C_{10}H_{10}O$) + Phenol (C_6H_6O)

Lestrade, 1952

%	f.t.	E
0	42	-
10	32	20
20	26	20
30	31	20
40	28	-31 (1+1)
50	23	-31
60	-5	-31
70	-9	-31
100	40	-

Benzalacetone ($C_{10}H_{10}O$) + Pyrocatechol ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f.t.
0	42
10	35
20	45
30	51
40	47
50	52 (1+1)
60	57
70	86

Chelintsev, 1937

%	f.t.	%	f.t.
0	42	40	49 E
10	35 E	50	51.5
20	45.5	60	57
27.3	53 (2+1)	64	70

Benzalacetone ($C_{10}H_{10}O$) + Resorcinol ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f.t.
0	42
10	29
20	34.5
30	39
40	36 (1+1)
70	108

Benzalacetone ($C_{10}H_{10}O$) + Hydroquinone ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.
0	42
10	71.5
20	78.5
30	81
40	82.5
50	82.5
60	83.5
70	143.5

Dibenzalacetone ($C_{17}H_{14}O$) + Pyrocatechol
($C_6H_6O_2$)

Chelintsev, 1937

and Chelintsev and Kuznetsov, 1939

%	f. t.
0	112
10	105
20	86
30	71
40	70 E
48.4	79 (1+2)
50	77.5
60	68 E
70	90

Dibenzalacetone ($C_{17}H_{14}O$) + Resorcinol ($C_6H_6O_2$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	110-112	56.4	95
9	100	60.6	98
18.7	82	70.4	102
26.5	95	81.5	106
37.8	96	95	110
44.5	93	100	110
51	91		
		(1 + 1)	

Chelintsev and Kuznetsov, 1939

%	f. t.
0	112
10	99
20	92
30	95.5
40	97.5
50	89.5
60	86
70	92

Dibenzalacetone ($C_{17}H_{14}O$) + Hydroquinone
($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.
0	112
10	98
20	93.5
30	94.5
40	99 (1+2)
50	88
60	96
70	158

Dibenzalacetone ($C_{17}H_{14}O$) + 1-Naphthol
($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
100	94	52.9	71
90.2	90	49.5	70
83.6	87	44.7	69
71.9	78	39.1	69
67.3	73	35.4	75
63.6	71	9.4	93 - 94
61	72	0	110 - 112
57.2	72		
(1 + 1)			

Dibenzalacetone ($C_{17}H_{14}O$) + 2-Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.
100	122
92.6	118
79.8	111
71.3	106
60.4	96
51.5	79
38.8	59
26.9	82
14	100
0	110-112

Dianisalacetone ($C_{13}H_{18}O_3$) + Resorcinol ($C_6H_6O_2$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	129	48.5	91
10.3	111	55.2	92
16.1	100	64.9	103
23.5	92 - 93	76.9	108
30.7	95	90.9	110
39.5	96	100	110

(1 + 2)

Dianisalacetone ($C_{13}H_{18}O_3$) + 1-Naphthol
($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
100	94	46.5	68
93.9	93	40.5	67
85.6	90	33.8	82
71.3	83	19.7	67
66.4	78	10.2	122
56.2	62 - 63	0	129
52.3	66		

(2 + 3)

Dianisalacetone ($C_{13}H_{18}O_3$) + 2-Naphthol ($C_{10}H_8O$)

Pfeiffer, 1929

%	f. t.	%	f. t.
0	129	57.4	85
13.8	114 - 115	63.4	98
31.5	90	67.1	105
32.5	103 - 104	75.2	112
38.1	79	83.9	116
43.8	77	95.9	120
49	75	100	120

(2 + 3)

Chalcone ($C_{15}H_{12}O$) + 1-Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	57 - 58	69.2	77
5.2	49	80.9	87 - 88
20.3	38	90	89
45.3	40	100	94
55.8	60		

Chalcone ($C_{15}H_{12}O$) + 2-Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	57 - 58	48.6	69
6.3	48 - 49	61.1	89
11.9	44	69.2	97 - 98
18.5	40	80.4	106
24.5	37	90	112
37.3	42 - 43	100	122

Quinone ($C_6H_4O_2$) + Hydroquinone ($C_6H_6O_2$)

Kremann, Sutter and al., 1922

%	f. t.	E	%	f. t.	E
0	114.3	-	50	169	-
3.38	111.5	-	50.25	166	- m
5	123.5	-	54.25	168	- m
10	140	-	54.62	168	-
15.61	102 m	-	59.0	161	150
20	153	-	60	166	-
23.38	94 m	-	67.68	159	-
30.08	87 m	75 m	70	159.5	150
35.45	80 m	-	72.22	155	150
40	166	-	77.42	150	-
41.85	116 m	-	80	152.5	150
42.70	126 m	75 m	84.4	155.5	-
44.31	135 m	-	85	155	150
45.25	139 m	-	90	160	-
47.64	153 m	-	100	169	-
48.37	162	-			

(1+1)

E : 3 % 107°
38 % 75° m m : metastableQuinone ($C_6H_4O_2$) + 2-Naphthol ($C_{10}H_8O$)

Kremann, Sutter and al., 1922

%	f. t.	f. t.
		after a long time
0	116	-
10	110	110
20	102	125
30	93	132
40	81	135
50	84.5	132
60	85	120.5
70	80	102.3
75	75	-
80	95	-
90	111	-
100	122	-

(1 + 1)

4-Ethoxybenzal acetophenone ($C_{17}H_{16}O_2$) + Picric acid ($C_6H_3O_7N_3$)

Asahina, 1934

mol%	f. t.	mol%	f. t.
100.0	122.0	52.9	83.0
95.4	118.5	52.0	82.5
90.8	116.0	50.3	84.0
86.2	112.0	42.4	83.2
81.5	110.0	32.0	79.0
76.8	106.3	21.6	69.5
67.2	98.0	10.8	68.5
62.6	93.0	6.5	72.0
60.0	89.0	0.0	74.5
55.4	85.0		
E ₁ : 53.5 mol%		81.0	
E ₂ : 16.7 mol%		60.5	
(1 + 1)			

Cinnamylidene acetophenone ($C_{17}H_{14}O$) + Resorcinol ($C_6H_6O_2$)

Pfeiffer, 1924

%	f.t.	%	f.t.
100	110	44.2	81
94	104 - 105	38.3	71
85	103	27.0	65
73	101	18.2	80
64.6	99	0	102 - 103
57.5	94		

p-Chloracetophenone (C_8H_7OCl) + Phenol (C_6H_6O)

Taboury and Lestrade, 1947

Raman spectra in the L

Flavone ($C_{15}H_{10}O_2$) + Dioxyflavone 5-6 ($C_{15}H_{10}O_4$)

Asahina, 1934

%	f.t.	m.t.
0	97.0	96.5
5	98.0	-
10	104.5	97.0
12	107.5	98.0
15	115.5	98.5
20	120.0	101.0
25	124.0	105.5
30	128.0	109.0
35	147	121.0
40	159	124.5
50	178.5	125.5
60	194	125.0
70	205.5	124.5
80	216.5	140.0
85	221	170.0
90	224.5	185.0
100	230.5	230.0

Flavone ($C_{15}H_{10}O_2$) + Dioxyflavone 5-7 ($C_{15}H_{10}O_4$)

Asahina and Yokoyama, 1935

%	f.t.	E
0	-	96.5
5.0	91.3	95.2
10.0	92.0	94.5
15.0	91.5	108.0
20.0	91.5	139.0
30.0	91.5	180.0
40.0	91.5	208.0
50.0	92.0	229.0
60.0	91.5	245.0
70.0	91.5	255.0
80.7	91.5	264.0
90	95.0	271.0
100	-	275.0

Flavone ($C_{15}H_{10}O_2$) + 5-Oxy-6-methoxyflavone ($C_{16}H_{12}O_4$)

Asahina and Yokoyama, 1935

%	f.t.	E
0	96.5	-
3	95.0	90.5
6	94.0	91.0
10	109.5	90.5
15	122.5	90.5
20	136.2	90.5
31	151.2	90.6
39.2	161.5	90.5
46.5	170.5	89.5
56	180.0	90.5
65	188.5	91.0
77.2	198.0	90.0
90	205.0	90.5
100	210.5	-

Dimethylpyrone ($C_7H_8O_2$) + Phenol (C_6H_6O)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	61.5	34.1
10.9	126.0	64.6	36.1
22.5	116.0	67.4	36.7
31.6	103.5	70.7	35.6
39.2	88.9	75.2	29.7
46.3	69.1	78.8	22.3
49.1	59.3	81.4	15.6
51.6	46.6	86.2	16.6
54.6	32.1	91.6	31.3
56.9	28.0	100	42.4
59.6	32.0		

(1 + 2)

Dimethylpyrone ($C_7H_8O_2$) + o-Nitrophenol ($C_6H_5O_3N$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	62.7	68.3
9.6	126.5	67.7	57.1
20.3	119.0	72.5	45.8
32	110.4	77.3	32.7
38.5	104.9	81.3	35.1
43.9	98.6	86.8	38.2
48.7	92.9	92.4	41.0
53.2	85.9	100	44.7
57.8	77.9		

Dimethylpyrone ($C_7H_8O_2$) + m-Nitrophenol ($C_6H_5O_3N$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	57.9	63.0
9.4	127.0	60.8	58.8
19.3	118.5	63.8	52.9
29.7	104.2	67	45.9
34.7	93.8	68.5	42.6
39	81.5	71	52.4
42.6	67.0	74.9	63.4
46.1	68.1	79.6	72.9
49.1	68.7	85.5	82.9
51.7	68.4	91.6	89.7
54.6	66.9	100	95.3

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + p-Nitrophenol ($C_6H_5O_3N$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	62.6	57.0
11.9	125.5	65.7	58.1
23	114.5	66.4	58.2
31.2	101.3	67.1	58.1
35.4	91.4	68.4	57.9
39.2	80.2	70	57.4
42.2	68.3	70	57.4
42.8	68.3	71.8	65.4
42.8	70.9	73.8	72.2
46.5	71.3	77.6	82.2
49.4	72.2	84.5	96.6
56.2	67.2	90.9	105.2
59.6	62.1	100	113.8
62.6	56.4		

(1 + 1)

(1 + 2)

Dimethylpyrone ($C_7H_8O_2$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	55	77.5
10.6	126.0	58.2	75.8
19.9	118.0	62.3	75.0
30.1	105.6	65.2	81.1
36.1	95.2	68.1	86.3
41.8	83.2	74.9	95.1
44.8	77.5	82.91	102.9
48.2	78.3	90.7	109.0
51.9	78.1	100	114.0

Dimethylpyrone (C_7H_8O) + Picric acid ($C_6H_3O_7N_3$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	47.4	100.2
12	124.0	49.1	100.8
21.3	111.2	52.3	100.4
25.6	101.1	56.4	98.8
29.4	90.0	61.6	94.9
32.5	83.5	65.9	87.6
33.3	81.9	70.0 (1+1)	87.5
34.8	86.7	73.9	92.4
36.2	89.5	77.6	97.4
38.1	92.9	84.9	104.8
40.5	96.1	90.4	110.6
44.3	98.9	100	118.4

Dimethylpyrone ($C_7H_8O_2$) + 1-Naphthol ($C_{10}H_8O$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	61.2	78.8
11.0	126.0	62.7	78.4
22.3	116.5	64.2	77.6
31.2	103.6	65.6	76.8
39.5	85.2	68	73.8
43.1	73.0	70.2	69.7
45.9	65.6	72.1	65.9
47.0	67.8	75	56.6
48.5	69.3	76.6	56.0
50	70.5	79.3	65.7
51.2	73.2	82.3	73.8
52.7	75.6	88.0	84.2
54.7	77.4	93.8	90.7
57.3	78.3	100	96.1
59.4	79.0		

(1 + 1) (2 + 3)

Dimethylpyrone ($C_7H_8O_2$) + 2-Naphthol ($C_{10}H_8O$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	59.4	39.4
12.4	126.0	59.8	40.3
23.7	114.5	61.9	42.5
33.4	99.5	64.1	43.9
38.4	87.1	65	37.4
42.8	74.5	66.4	44.5
44.6	68.2	67	44.6
47.9	54.9	69.8	54.5
50.7	40.7	72.7	70.6
53.5	24.3	74.9	79.9
53.5	36.6	78.6	92.0
55.3	38.0	85.9	107.9
56.2	34.4	90.4	113.8
56.2	38.4	100	121.6
57.8	39.0		

(1 + 1) (1 + 2)

Coumarin ($C_9H_6O_2$) + Vanillin ($C_8H_8O_3$)

Lehmann, 1914

%	f. t.	%	f. t.
100	81.8	90	78.0
99	81.4	85	77.0
98	80.5	80	73.0
97	80.0	75	72.0
96	80.0	70	71.1
95	79.6	65	68.4
94	78.8	60	66.2
93	80.0	55	57.2
92	78.4	50	51.8
91	78.2	0	67

Tetramethylphthalane ($C_{12}H_{16}O$) + Pyrocatechol ($C_6H_6O_2$)

Bennett and Wain, 1936

mol%	f. t.	m. t.
100	104.7	103.9
90.3	100.4	74.8
79.7	93.5	80.2
68.4	84.6	79.6
59.8	83.7	79.2
51.4	85.2	80.1
40.3	83.7	57.4
34.0	80.4	58.7
25.2	73.3	58.5
19.7	66.1	59.2
12.9	62.2	58.9
6.1	68.2	59.3
0	72.1	71.1 (1+1)

Tetramethylphthalane ($C_{12}H_{16}O$) + Resorcinol ($C_6H_6O_2$)

Bennett and Wain, 1936

mol%	f. t.	m. t.
100	110.1	109.0
90.6	106.3	71.6
73.9	97.5	72.3
60.2	87.9	72.8
50.5	77.8	72.6
47.4	77.9	73.2
42.9	82.4	73.0
38.3	86.1	72.6
32.8	88.5	81.6
24.1	85.9	65.8
16.8	80.1	66.8
10.9	72.5	67.2
5.6	68.1	65.4
0	72.1	71.1

(2 + 1)

Tetramethylphthalane ($C_{12}H_{16}O$) + p-Xylenol ($C_8H_{10}O$)

Bennett and Wain, 1936

mol%	f. t.	E
100	77.5	76.0
74.4	60.4	37.9
60	45.3	36.8
54.9	39.8	36.8
48.8	39.7	34.5
45	40.2	34.8
40	38.7	34.4
38.9	36.5	33.8
34.8	41.8	34.2
24.8	53.1	33.5
11.5	64.6	34.3
0	72.1	71.1

(1 = 1)

Tetramethylphthalane ($C_{12}H_{16}O$) + Trichlorophenol s.
($C_6H_3OCl_3$)

Bennett and Wain, 1936

mol%	f.t.	mol%	f.t.
100	66.7	48.1	9.1
90	62.7	40	10.6
77.9	55.1	32.9	41.8
71.6	48.3	24.2	56.1
60.1	36.2	13.6	66.5
52.6	20.3	0	72.1

Tetramethylphthalane ($C_{12}H_{16}O$) + p-Bromphenol
(C_6H_5OBr)

Bennett and Wain, 1936

mol%	f.t.	E
100	64.0	63.0
82.9	42.9	29.8
71.1	37.4	29.8
65	39.1	30.1
62.2	46.1	29.5
55.2	52.2	30.5
48.7	54.2	52.1
44.7	53.2	41.2
38.4	49.8	40.6
34.3	46.8	40.4
30.3	45.5	39.5
16.6	59.4	39.9
0	72.1	71.1

(1 + 1)

Tetramethylphthalane ($C_{12}H_{16}O$) + Tribromphenol s
($C_6H_3OBr_3$)

Bennett and Wain, 1936

mol%	f.t.	E
100	92.9	91.6
86.9	86.9	38.3
72.2	78.0	38.7
60.8	68.5	38.5
52.6	60.1	38.1
50.1	57.1	39.0
46.0	52.6	30.2
41.4	45.2	38.3
36.3	42.3	37.2
31.9	49.1	38.3
23.6	57.8	38.5
15.7	63.2	38.7
6.1	69.0	38.8
0	72.1	71.1

Tetramethylphthalane ($C_{12}H_{16}O$) + p-Iodphenol
(C_6H_5OI)

Bennett and Wain, 1936

mol%	f.t.	E
100	92.5	91.6
86.1	83.1	49.2
75.9	72.6	42.0
63.1	58.8	43.2
63.2	47.6	42.5
59.8	48.1	42.8
56.2	49.7	42.1
53.8	51.2	42.2
50.8	51.7	43.1
45.6	51.1	39.5
41.0	48.4	38.8
37.1	44.9	38.5
28.4	47.7	39.6
19.3	57.8	39.1
12.4	65.3	39.4
0	72.1	71.1

(1 + 1)

Tetramethylphthalane ($C_{12}H_{16}O$) + 1-Naphthol
($C_{10}H_8O$)

Bennett and Wain, 1936

mol%	f.t.	E
100	96.2	95.1
87.9	90.3	76.3
74.2	81.0	76.4
66	79.4	76.1
60.2	88.1	76.3
55.1	91.6	76.4
50.2	92.5	79.3
45	92.1	75.8
39.8	90.5	64.6
32.9	86.1	64.2
23.7	78.3	64.3
15.8	69.8	64.3
10	66.6	64.2
6.9	68.9	63.9
0	72.1	71.1

(1 + 1)

Tetramethylphthalane ($C_{12}H_{16}O$) + 2-Naphthol
($C_{10}H_8O$)

Bennett and Wain, 1936

mol%	f. t.	E
100	122.0	121.1
78.6	107.5	69.7
67.5	95.8	69.4
58.6	81.7	70.2
55.3	76.1	70.5
49.5	74.4	70.0
39.6	78.2	70.9
30.6	78.9	65.1
18.5	73.9	65.3
11.9	69.4	65.2
4.7	69.1	65.0
0	72.1	71.1

(2 + 1)

2-Keto cineole ($C_{10}H_{16}O_2$) + Phenol (C_6H_6O)

Brambilla, 1942

%	f. t.	%	f. t.
0	40.6	70	- 1.8
10	26.2	80	+16.1
20	10.0	90	31.0
30	-10.4	100	42.4

2-Keto cineole ($C_{10}H_{16}O_2$) + Resorcinol ($C_6H_6O_2$)

Brambilla, 1942

%	f. t.	%	f. t.
0	40.6	80	92.7
10	22	90	100.8
70	83.1	100	110.2

2-Keto cineole ($C_{10}H_{16}O_2$) + p-Cresol (C_7H_8O)

Brambilla, 1942

%	f. t.	%	f. t.
0	40.6	70	15.6
10	32.5	80	22.4
20	22.6	90	29.0
30	10.0	100	36.1

2-Keto cineole ($C_{10}H_{16}O_2$) + o-Nitrophenol
($C_6H_5O_3N$)

Brambilla, 1942

%	f. t.	%	f. t.
0	40.6	50	18.4
10	25.8	60	24.8
20	17.7	70	30.7
30	7.3	80	35.8
35	1.8	90	40.5
40	7.9	100	43.8

2-Keto cineole ($C_{10}H_{16}O_2$) + 4,6-Dinitro-o-cresol
($C_7H_6O_5N_2$)

Brambilla, 1942

%	f. t.	%	f. t.
0	40.6	60	53.5
10	28.0	70	61.3
20	22.2	80	69.0
30	21.8	90	76.4
40	21.2	100	86.0
50	20.4		

Monofurfurylidene acetone ($C_8H_8O_2$) + Resorcinol
($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	39	20	19
10	30	70	56

Furfurylidene acetone ($C_8H_8O_2$) + Hydroquinone
($C_6H_6O_2$)

Chelintsev, 1937

and Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	39	40	34.5
10	28.5 E	50	37.5
20	33	60	160
30	31 E	70	162

(4+1)

Monofurfurylidene acetone ($C_6H_8O_2$) + Pyrocatechol ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	39	40	- 3
10	32	50	- 4.5
20	14	60	+80
30	5		

Difurfurylidene acetone ($C_{13}H_{10}O_3$) + Pyrocatechol ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	58	40	67
10	44.5	50	69
20	48	60	70.5
30	63	70	73

Difurfurylidene acetone ($C_{13}H_{10}O_3$) + Resorcinol ($C_6H_6O_2$)

Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	58	40	63
10	58.5	50	55
20	59	60	53
30	57 (1+1)	70	82

Difurfurylidene acetone ($C_{13}H_{10}O_3$) + Hydroquinone ($C_6H_6O_2$)

Chelintsev, 1937 and Chelintsev and Kuznetsov, 1939

%	f. t.	%	f. t.
0	58	50	83
10	75	60	85
20	79	64	110
33.9	82.5 (1+1)	70	156"
40	79 E		

Sulfonal ($C_7H_6O_4S_2$) + Resorcinol ($C_6H_6O_2$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
97.5	110	63	55.0 E
94.9	110.0	58	61.0
92.2	105.0	52.8	70.0
89.2	101.0	47.1	77.0
86.2	97.0	40.9	92.0
82.9	90.0	34.2	100.0
79.4	82.0	26.8	106.0
75.7	78.0	18.8	112.0
71.7	71.0	9.9	119.0
67.5	63.0	0	125

Sulfonal ($C_7H_6O_4S_2$) + 2-Naphthol ($C_{10}H_8O$)

Bianchini, 1914

mol%	f. t.	E	min.
0	124.5	-	-
10	120.5	67	60
20	114	"	80
30	108.5	"	90
40	95	"	110
50	82	"	150
60	68.5	"	180
70	83	"	140
80	99	"	100
90	110	"	40
0	122	-	-

Kordes, 1926

mol%	f. t.
0	125
62	67 E
100	122

Sulfonal ($C_7H_6O_4S_2$) + Salipyrin ($C_{18}H_{18}O_4N_2$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	92	36.4	108.0
93.0	88.5	31.8	111.0
86.3	86.0	27.4	112.5
79.8	84.5	23.1	114.5
73.7	81.5	18.9	117.0
67.7	80.0 E	14.9	118.5
62.0	87.0	11.0	120.5
56.5	93.0	7.2	123.0
51.2	97.5	3.5	124.5
46.1	101.3	0	125
41.1	104.0		

2-Bromcamphor ($C_{10}H_{15}OBr$) + Salol ($C_{13}H_{10}O_3$)

Caille, 1909

%	f. t.
0	79
64	21 E
100	42

Acetaldehyde (C_2H_4O) + Acetic acid ($C_2H_4O_2$)

Morozov, Kogan and Grossblyat, 1934

mol%	p	mol%	p
10°		20°	
92.45	54.6	91.2	90.7
90	72.0	73	232.6
79.3	140.5	60.9	325.5
60.8	238.0	46.1	429.6
45.9	309.0	0	721.0
19.1	425.0		
0	503.4		

Pascal, Dupuy and al., 1921

L	%	V	b. t.
768mm			
65.2		4.7	42
75.3		9.5	50
80.8		14.7	58
85.9		24.4	68
93.2		43.6	84
100		100	118

%	d	%	d
20°			
100	1.049	32.2	0.866
90.19	1.022	16.3	0.824
77.8	0.989	4.8	0.793
65.3	0.956		
44.5	0.900		

Chloral (C_2HOC1_3) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.
99.24	-0.165
97.26	0.640
94.84	1.275
90.58	2.480
87.30	3.500
84	4.590
81.28	5.540

Citronellal ($C_{10}H_{18}O$) + Caproic Acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	208.0	-
10	-	-0.3
-	204.5 Az	-
100	205.15	-

Benzaldehyde (C_7H_6O) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.
99.55	-0.162
98.52	0.537
96.24	1.345
92.61	4.835
86.37	7.430
79.28	-

Abegg, 1894

N	f. t.
0	16.52
0.620	14.295
1.363	11.685
2.107	8.985
2.791	6.475
3.283	4.595

Benzaldehyde (C_7H_6O) + Valeric Acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	179.2	-
15	-	-1.0
-	178.5 Az	-
100	186.35	-

Benzaldehyde (C_7H_6O) + Isovaleric Acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	179.2	-
62	174.4 Az	-
65	-	-2.1
100	176.5	-

Benzaldehyde (C_7H_6O) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	55.6	7.1
91.5	51.3	50.0	8.4
83.8	44.7	45.4	7.2
75.2	33.1	40.0	4.3
69.1	21.0	34.3	-0.8
63.8	4.3	29.4	-6.9
61.1	3.6		
(1 + 1)			

Pushin and Rikovski, 1940 - 1946

mol%	f. t.	E
100	57	-
90	47	-
80	35	-2.5
70	16	0
63	2	0
60	2	-1.5
55	4.5	-
50	6	-
40	2.5	-
30	-6	-
20	-19	-
10	-41	-
0	-26	-

Anisaldehyde ($C_8H_8O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	48.7	30.7
90.2	50.0	41.8	27.7
80.9	37.7	35.1	21.9
72.8	22.2	27.1	12.6
69.8	17.9	18.8	0.3
67.6	17.9	12.0	-8.1
61.8	24.4	6.8	-4.9
55.3	29.4	0	-0.9
(1 + 1)			

Furfural ($C_5H_4O_2$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol% (b. t.)			
L	V	L	V
0	0	50	78.3
5	13.6	60	84.5
10	27.0	70	89.4
20	46.5	80	93.5
30	60.2	90	97.2
40	70.4	100	100.0

Furfural ($C_5H_4O_2$) + Butyric Acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	161.45	-
42.5	159.4 Az	-
47	-	-2.9
100	164.0	-

Furfural ($C_5H_4O_2$) + Isobutyric Acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	161.45	-
-	153.8 Az	-
90	-	-1.5
100	154.6	-

Furfural ($C_5H_4O_2$) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr, Sedgwick, and Ralston, 1946

%	f. t.
18.4	0.0
68.3	10.0

Furfural ($C_5H_4O_2$) + Capric acid ($C_{10}H_{20}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
3.7	0.0
8.1	10.0
29.8	20.0
97.0	30.0

Furfural ($C_5H_4O_2$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
0.3	10.0
3.6	20.0
17.2	30.0
92.3	40.0

Furfural ($C_5H_4O_2$) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
1.5	30.0
12.0	40.0
88.8	50.0

Furfural ($C_5H_4O_2$) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
1.6	40.0
13.6	50.0
94.7	60.0

Furfural ($C_5H_4O_2$) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
2.5	50.0
22.1	60.0

Furfural ($C_5H_4O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.
0.1	-30
0.3	-20
1.3	-10
4.5	0
12.7	10
21.2	20

C.S.T. = 26.2°

Acetone (C_3H_6O) + Formic acid (CH_2O_2)

Udovenko, 1939

mol%	d		
	25°	35°	45°
0.00	0.7850	0.7735	0.7602
10.14	0.8102	0.7991	0.7881
20.68	0.8389	0.8280	0.8164
29.90	0.8665	0.8551	0.8439
40.09	0.9000	0.8890	0.8777
49.45	0.9338	0.9227	0.9119
60.83	0.9809	0.9695	0.9577
69.98	1.0236	1.0123	1.0001
80.14	1.0782	1.0661	1.0544
89.47	1.1392	1.1265	1.1147
100.00	1.2144	1.2017	1.1898

Udovenko, 1939

mol%	η		
	25°	35°	45°
0.00	317.2	290.7	264.9
10.14	357.3	325.1	295.4
20.68	400.2	363.9	328.7
29.90	448.2	406.3	365.7
40.09	519.2	465.9	416.3
49.45	597.2	531.5	472.6
60.83	731.2	642.0	560.9
69.98	862.2	745.5	645.7
80.14	1052.8	906.0	771.9
89.47	1287.3	1078.9	913.9
100.00	1627.1	1304.3	1088.7

Acetone (C_3H_6O) + Acetic acid ($C_2H_4O_2$)

York, Jr. and Holmes, 1942

b. t.	%	mol%	%	mol%
L		V		
112.1	95.9	95.8	89.5	89.2
-	92	91.8	78	77.5
107.4	90	89.7	74.9	94.3
106.3	88.3	88	71.8	71.1
106.1	87.6	87.3	69.7	69
105.4	88.5	88.2	70.4	69.7
104.6	84.6	84.2	65.1	64.4
101.4	81.1	80.6	57.5	56.7
98.7	82	81.4	54.4	54.6
94.3	78	77.4	44.4	44.6
92.5	76.9	76.4	42.9	42
90.4	73.6	72.4	37.8	37
87.0	71.3	70.6	34.7	34
86.3	70	69.3	29.8	29.1
78.6	57.5	56.7	16	15.6
74.2	56.9	46.2	8.2	8
70.8	75.7	45	8.7	8.2
65.6	34	35.2	3.4	3.4
63.6	24.6	23.9	1.9	1.9
60.7	6.7	6.5	0.3	0.2

Othmer, 1943

mol%		b. t.
L	V	
100	100	118.1
95	83.8	110.0
90	69.4	103.8
80	44.3	93.1
70	27.5	85.8
60	16	79.7
50	8.8	74.6
40	5.3	70.2
30	3.1	66.1
20	1.6	62.6
10	0.7	59.2
0	0	56.1

Beckmann, 1888

%	D f. t.	%	D f. t.
0.50	-0.340	8.43	5.785
1.75	1.175	11.09	7.775
4.21	2.835	13.72	9.740

Timmermans, 1957

%	f. t.	E
0	- 95	-
12.75	-101.3	-
24.65	- 71.5	-100
33.3	- 51.2	-
52.8	- 26.1	-
61.0	- 18.0	-
80.4	+ 2.0	-
100	+ 16.4	-
tr. t.	- 53.7	-

Timmermans, 1958

t	tr.p.	f.p.	tr.p.	f.p.	tr.p.	f.p.
	20%		40%		60%	
12.5	-	-	1520	1220	-	-
17.5	1300	-	-	1710	2550	1320
25	1400	-	1600	1410	2750	1420
32.5	1610	1160	2440	1620	2980	1610
40	2050	1750	2870	1750	-	-
47.5	2355	1820	3130	1920	-	-
55	2850	-	-	-	-	-
62.5	3100	-	-	-	-	-

tr. p. and f. p. are transition and freezing pressure in Kgs

Mathews and Cooke, 1914

t	d
50%	
0	0.9363
25	0.9083
40	0.8917
55	0.8752
70	0.8574

Kendall and Brakeley, 1921

mol%	d	mol%	d
25°			
0	0.7872	59.73	0.9333
9.96	0.8089	69.68	0.9609
20.35	0.8351	80.15	0.9907
30.25	0.8568	90.37	1.0255
40.49	0.8847	100	1.0499
49.86	0.9064		

Hammick and Andrew, 1929

mol%	d
25°	
100	1.0510
70.91	0.9996
50.02	0.9547
38.17	0.9247
27.12	0.8921
0	0.7867

Rao, 1934

%	d	%	d
30°			
0	0.794	72.0	0.968
16.0	0.832	86.3	1.006
37.4	0.884	100	1.040
55.2	0.928		

Udovenko, 1939

mol%	d		
	20°	30°	40°
0.00	0.7901	0.7774	0.7665
13.00	0.8219	0.8104	0.7992
22.20	0.8435	0.8326	0.8214
31.20	0.8632	0.8522	0.8411
40.25	0.8888	0.8783	0.8679
50.66	0.9151	0.9041	0.8932
60.50	0.9406	0.9295	0.9191
69.94	0.9660	0.9554	0.9445
80.50	0.9943	0.9844	0.9727
90.11	1.0215	1.0105	0.9996
100.00	1.0489	1.0381	1.0273

Faust, 1912

mol%	η		
	0°	18°	42°
100	2380	1391	1003
70	1315	936	686
40	818	583	470
0	400	350	280

Mathews and Cooke, 1914

t	η
50°	
0	961.0
25	666.4
40	533.2
55	455.2
70	399.0

Kendall and Brakeley, 1921

mol%	η	mol%	η
25°			
0	306.5	59.73	699.4
9.96	349.6	69.68	802.6
20.35	404.6	80.15	921.3
30.25	463.6	90.37	1036
40.49	535.0	100	1121
49.86	609.8		

Udovenko, 1939

mol%	η		
	20°	30°	40°
0.00	329.8	303.3	276.6
13.00	390.9	254.6	232.8
22.20	438.9	397.6	360.7
30.20	491.6	441.1	399.3
40.25	563.2	501.5	451.8
50.66	654.9	576.6	513.8
60.50	751.5	656.2	581.7
69.94	861.2	748.2	656.4
80.50	988.1	852.7	743.7
90.11	1102.6	947.2	821.8
100.00	1208.8	1027.0	894.8

Hammick and Andrews, 1929

mol%	σ
25°	
100	28.52
70.91	27.79
50.02	26.74
38.17	26.14
27.12	25.53
0	22.72

Kendall and Gross, 1921			
mol%	$\kappa \cdot 10^7$	mol%	$\kappa \cdot 10^7$
25°			
0	0.58	51.04	5.08
12.56	3.02	64.92	4.80
20.27	3.46	71.43	4.32
28.65	4.19	81.10	3.12
39.45	4.42	92.23	1.33
46.03	4.58	100	0.24
Passerini, 1924			
%	$\kappa \cdot 10^7$	%	$\kappa \cdot 10^7$
7.5°			
100	7.740	48.6	1.409
95.7	6.410	43.1	1.585
91.1	5.385	36.6	1.655
86.7	4.565	33.1	1.912
82.2	3.825	27.6	2.120
77.4	3.148	22.4	2.285
72.8	2.503	16.9	2.225
68.1	2.194	11.4	1.990
62.3	1.839	5.7	1.510
58.2	1.608	0	0.103
53.2	1.480		
Elskens, 1948			
cycles/sec	$\kappa \cdot 10^7$		
	0%	37.5%	100%
20°			
250	4.72	17.1	0.742
500	5.00	20.1	0.760
750	5.33	23.8	0.778
1000	5.69	39.3	0.791
vol%	ϵ	vol%	ϵ
20°			
0	21.5	62.5	26.5
12.5	26.0	75	21.5
25	30.5	87.5	14.5
37.5	33.5	100	7.1
50	31.0		
Rao, 1934			
%	χ	%	χ
30°			
0	0.592	72.0	0.540
16.0	0.580	86.3	0.531
37.4	0.565	100	0.520
55.2	0.553		

Acetone (C_3H_6O) + Butyric acid ($C_4H_8O_2$)			
Weissenberger, Henke and Katschinka, 1926			
mol%	ρ		
20°			
75	42.0		
60	63.8		
50	77.4		
40	101.8		
25	119.3		
0	179.6		
Udovenko, 1939			
mol%	d		
	25°	35°	45°
0.00	0.7850	0.7735	0.7602
9.96	0.8096	0.7986	0.7876
18.83	0.8296	0.8184	0.8078
30.23	0.8521	0.8414	0.8310
37.59	0.8655	0.8554	0.8453
51.44	0.8894	0.8792	0.8697
59.77	0.9022	0.8924	0.8822
70.09	0.9144	0.9065	0.8908
79.89	0.9300	0.9199	0.9102
90.16	0.9421	0.9319	0.9231
92.75	0.9447	0.9355	0.9258
100	0.9531	0.9432	0.9336
mol%	η		
	25°	35°	45°
0.00	317.2	290.7	264.9
9.96	386.7	351.0	318.3
18.83	457.6	413.1	366.6
30.23	566.6	504.7	448.9
37.59	647.7	574.1	513.5
51.44	818.1	715.3	626.5
59.77	930.7	809.5	707.8
70.09	1071.4	924.6	796.9
79.89	1215.9	1040.7	894.2
90.16	1361.0	1158.1	994.7
92.75	1408.4	1197.3	1017.9
100	1501.9	1270.1	1078.4
Acetone (C_3H_6O) + 1-Methyl caproic acid ($C_7H_{14}O_2$)			
Rule, Smith and Harrower, 1933			
mol%	$(\alpha)_{5461}^{mol}$		
20°			
2.6	+36.6		
4.8	36.4		
5.5	36.3		
13.2	35.75		
21.7	35.21		
41.2	34.21		
56.6	33.61		
100.0	32.15		

Acetone (C_3H_6O) + Caprylic acid ($C_8H_{16}O_2$)

Ralston and Hoerr, 1942

%	f. t.
68.8	0
90.7	10
100	16.38

Acetone (C_3H_6O) + Pelargonic acid ($C_9H_{18}O_2$)

Ralston and Hoerr, 1942

%	f. t.
78.0	0
97.4	10
100	12.24

Acetone (C_3H_6O) + Caprinic acid ($C_{10}H_{20}O_2$)

Ralston and Hoerr, 1942

%	f. t.
31.1	0
52.7	10
80.2	20
97.9	30
100	30.92

Acetone (C_3H_6O) + Undecanoic acid ($C_{11}H_{22}O_2$)

Ralston and Hoerr, 1942

%	f. t.
33.5	0
59.9	10
87.5	20
100	28.13

Acetone (C_3H_6O) + Lauric acid ($C_{12}H_{24}O_2$)

Ralston and Hoerr, 1942

%	f. t.
0	0
17.9	10
37.7	20
68.3	30
94.0	40
100	43.86

Acetone (C_3H_6O) + Tridecanoic acid ($C_{13}H_{26}O_2$)

Ralston and Hoerr, 1942

%	f. t.
7.0	0
16.8	10
43.9	20
75.9	30
98.8	40
100	41.76

Acetone (C_3H_6O) + Myristic acid ($C_{14}H_{28}O_2$)

Ralston and Hoerr, 1942

%	f. t.
2.60	0
6.05	10
13.7	20
29.8	30
59.8	40
100	53.78

Acetone (C_3H_6O) + Pentadecanoic acid ($C_{15}H_{30}O_2$)

Ralston and Hoerr, 1942

%	f. t.
2.1	0
5.1	10
12.1	20
33.0	30
64.5	40
100	52.49

Acetone (C_3H_6O) + Succinic acid ($C_4H_6O_4$)

Schweiger, unpublished

%	f. t.	%	f. t.
2.42	0	25	106
2.90	10	45	144
3.68	20	65	165
4.76	30	85	177
6.13	40	100	183

Acetone (C_3H_6O) + Maleic acid ($C_4H_4O_4$)

Weiss and Downs, 1923

26.36% f. t. = 29.7°

Acetone (C_3H_6O) + Malic acid ($C_4H_6O_5$)

Nasini and Gennari, 1896

%	d	(α)				
		red	yellow	green	pale blue	dark blue
20°						
22.000	0.90713	-4.93	-6.01	-7.10	-7.53	-8.90

Acetone (C_3H_6O) + Chloracetic acid ($C_2H_3O_2Cl$)

Weissenberger, Schuster and Pamer, 1925

mol %	p
20°	
0	179.63
10	147.7
20	114.5
30	84.0
40	63.1-
50	42.7

Udovenko, 1939

mol%	d		
	25°	35°	50°
0.00	0.7850	0.7735	0.7523
13.59	0.8583	0.8475	0.8301
18.55	0.9032	0.8921	0.8751
28.89	0.9697	0.9586	0.9420
37.86	1.0283	1.0164	1.0004
47.91	1.0918	1.0801	1.0629
69.71	-	1.2186	1.1997
81.45	-	-	1.2710

mol%	η		
	25°	35°	50°
0.00	317.2	290.7	254.7
13.59	435.1	394.0	340.9
18.55	533.9	477.7	413.4
28.89	732.9	543.5	539.3
37.86	972.7	843.9	687.6
47.91	1344.6	1131.0	904.2
69.71	-	2166.5	1599.7
81.45	-	-	2123.2

Kataeva and Smutkina, 1955

N		σ		N		σ	
I				13°			
0.00	24.20			2.10	26.09		
0.25	24.51			2.26	26.30		
0.50	24.84			2.57	26.56		
0.76	24.87			2.68	26.48		
1.03	25.02			2.98	27.26		
1.37	25.51			3.03	26.90		
1.77	25.83			3.24	27.35		
2.02	26.10			3.26	27.30		
				20°			
0.00	23.84			2.12	25.40		
0.91	24.10			3.00	26.47		
1.16	24.20			3.14	26.58		
1.56	24.75						
N		σ		N		σ	
II				13°			
0.00	24.20			3.03	26.95		
1.94	26.15			3.07	26.93		
2.64	26.99			3.10	27.00		
2.70	26.90			3.20	27.36		
				20°			
0.00	23.84			2.10	25.35		
0.75	23.87			2.99	26.35		
1.30	24.60			3.15	26.25		
2.09	25.20						

Acetone (C_3H_6O) + Dichloroacetic acid ($C_2H_2O_2Cl_2$)

Weissenberg, Schuster and Pamer, 1925

mol %	p	Q mix	mol %	p	Q mix
20°					
0	179.63	-	50	21.0	1149
10	147.6	445	60	9.2	1010
20	114.5	690	70	4.0	820
30	81.0	867	80	2.1	580
40	50.0	1025			

Acetone (C_3H_6O) + Trichloroacetic acid (C_2HCl_3)

Weissenberg, Schuster and Pamer, 1925

mol %	p	mol %	p
20°			
0	179.63	30	76.6
10	147.5	40	40.0
20	112.6	50	5.6

Kendall and Brakeley, 1921

mol %	d	η	mol %	d	η
25°					
0	0.7872	306.5	38.26	1.209	143.3
4.84	0.8541	368.0	50.48	1.319	257.1
13.16	0.9342	485.5	59.71	1.400	382.9
25.43	1.073	815.6	71.75	1.483	580.8

Kendall and Gross, 1921

mol%	%	κ	
25° 60°			
0	0	0.00054	-
0.37	8.94	0.00886	-
6.76	16.94	0.01284	-
10.05	23.92	0.01630	-
12.52	28.71	0.01985	-
16.28	35.37	0.02145	-
19.53	40.58	0.02229	-
23.04	45.72	0.02248	-
26.02	49.77	0.02189	-
28.57	52.95	0.02051	-
31.81	56.77	0.01834	-
40.04	65.26	0.01441	-
47.32	71.65	0.01180	-
54.17	76.88	0.00957	-
59.74	80.68	0.00738	-
65.79	84.40	0.00544	-
72.47	88.10	0.00331	-
76.60	90.21	0.002023	0.0003601
92.66	97.26	-	0.000257
100	100	-	0.000006

Udovenko, 1939

mol%	d		
	35°	45°	55°
0.00	0.7735	0.7602	-
16.50	0.9665	0.9550	0.9445
25.17	1.0526	1.0483	1.0360
34.85	1.1583	1.1471	1.1346
44.11	1.2473	1.2346	1.2220
55.37	1.3433	1.3302	1.3268
68.08	1.4415	1.4268	1.4141
74.75	1.4876	1.4738	1.4605
85.21	1.5568	1.5438	1.5326
91.83	-	1.5815	1.5681

mol%	η		
	35°	45°	55°
0.00	290.7	264.9	-
16.50	503.9	453.0	415.6
25.17	689.3	607.8	551.3
34.85	1009.8	883.3	790.5
44.11	1508.0	1272.5	1114.8
55.37	2424.1	1967.0	1633.6
68.08	3725.3	2922.4	2381.5
74.75	4527.2	3504.2	2811.9
85.21	5854.6	4441.3	3495.6
91.83	-	5024.4	3899.4

Acetone (C_3H_6O) + Benzoic acid ($C_7H_6O_2$)

Beckmann, 1890

%	b. t.
0	56.3
1.87	56.575
2.39	56.649
4.68	56.99
5.51	57.106
9.75	57.782
11.19	57.995
16.63	58.998
18.73	59.267

Mortimer, 1923

mol%	f. t.
15.8	0
20.5	20
26.9	40
36.2	60
100.0	121.0

Carroll, Rollefson and Mathews, 1925

%	f. t.
24.5	0
33.5	25

Chatterji and Bose, 1950

t		t	
η (acetone = 1)		η (acetone = 1)	
33.33%		37.50%	
30	2.218	30	2.455
35	2.174	35	2.405
40	2.144	40	2.353
45	2.146	45	2.303
<hr/>			
%		κ	
25°		35°	40° 45°
34.37	0.006762	0.00742	0.007781 0.008010
37.31	-	0.007095	- 0.007781
39.94	-	0.006873	- 0.007571
41.95	-	0.006541	- 0.007201

Acetone (C_3H_6O) + Salicylic acid ($C_7H_6O_3$)

Chatterji and Bose, 1950

t		t	
η (acetone = 1)		η (acetone = 1)	
31.28%		35.68%	
30	2.093	30	2.443
35	2.046	35	2.354
40	2.015	40	2.322
45	2.020	45	2.305
<hr/>			
%		κ	
25°	30°	35°	45° 40°
32.73	0.01651	0.01752	0.01823 0.01982 0.01914
36.12	-	.01772	- .02033 -
38.83	-	.01756	- .02037 -
41.29	-	.01765	0.01855 .02066 0.01962

Timofeev, 1905

%		Q dil	
initial	final	(by mole acid)	
1.62	4.44	-2.38	
4.44	8.03	-2.49	
19.04	21.2	-2.88	

Acetone (C_3H_6O) + Cinnamic acid ($C_9H_8O_2$)

Chatterji and Bose, 1950

t		η (acetone =1)	
16.87%			
30		1.617	
35		1.605	
40		1.581	
45		1.592	
%		κ	
30°		35°	40° 45°
16.22	0.007683	-	- 0.008754
24.63	0.009430	-	- 0.011190
27.82	0.009772	0.010320	0.010800 0.011190
30.93	0.009798	-	- 0.011136
32.73	-	-	- 0.011500

Acetone (C_3H_6O) + o-Aminobenzoic acid ($C_7H_7O_2N$)

Chatterji and Bose, 1950

%		κ	
25°		30°	40° 45°
18.14	0.01689	-	- 0.02033
24.52	0.02778	-	- 0.03431
41.35	0.04365	0.04698	0.05310 0.05570
47.11	0.04922	-	- 0.06440
50.25	0.05450	0.05794	0.06550 0.06948

Acetone (C_3H_6O) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Collett and Lazzell, 1930

mol%		f.t.	
mol%	f.t.	mol%	f.t.
100.00	147.7	51.32	97.6
77.62	129.9	39.32	75.2
62.55	113.5	36.66	68.2
53.84	101.9	25.85	37.6

Chatterji and Bose, 1950

t	η	t	η
(acetone = 1)		(acetone = 1)	
40.3%		45.1%	
30	3.428	30	4.708
35	3.327	35	4.578
40	3.258	40	4.441
45	3.200	45	4.325
%	κ	%	κ
25°		35°	
42.53	0.04578	0.04936	0.05313
44.98	0.04456	-	-
51.46	0.04190	-	-
53.07	0.03908	0.04211	0.04594
%	κ	%	κ
40°		45°	
42.53	0.05675	0.06053	
44.98	-	0.05940	
51.46	-	0.05624	
53.07	0.04922	0.05256	

Acetone (C_3H_6O) + m-Nitrobenzoic acid ($C_7H_5O_4N$)

Collett and Lazzell, 1930

mol%	f. t.
100.00	142.4
76.83	120.7
61.53	104.0
51.08	88.0
38.32	64.8
22.70	28.0

Chatterji and Bose, 1950

t	η	t	η
(acetone = 1)		(acetone = 1)	
37.4%		50.7%	
30	2.953	30	5.514
35	2.898	35	5.312
40	2.838	40	5.203
45	2.826	45	5.058

%	κ	%	κ
25°		35°	
33.42	0.01713	0.01822	0.01932
37.39	0.01758	-	-
44.40	0.01796	-	-
47.44	0.01809	-	-
49.56	0.01747	0.01963	0.02095
%	κ	%	κ
40°		45°	
33.42	0.02031	0.02118	
37.39	-	0.02214	
44.40	-	0.02320	
47.44	-	0.02390	
49.56	0.02230	0.02406	

Acetone (C_3H_6O) + p-Nitrobenzoic acid ($C_7H_5O_4N$)

Collett and Lazzell, 1930

mol%	f. t.
100.00	239.9
28.78	164.1
21.91	147.3
10.48	105.5
5.74	72.5

Methyl ethyl ketone (C_4H_8O) + Formic acid
(CH_2O_2)

Udovenko, 1939

mol%	d	mol%	d
25°		35°	
0.00	0.7989	0.7885	0.7781
10.13	0.8185	0.8080	0.7975
20.06	0.8395	0.8292	0.8189
30.07	0.8642	0.8538	0.8429
39.62	0.8904	0.8798	0.8690
49.85	0.9227	0.9117	0.9006
60.20	0.9609	0.9501	0.9387
70.14	1.0051	0.9945	0.9819
79.72	1.0569	1.0445	1.0332
90.11	1.1257	1.1145	1.0332
100.00	1.2144	1.2017	1.1898
mol%	η	mol%	η
25°		35°	
0.00	389.5	354.7	321.3
10.13	427.1	386.3	347.9
20.06	470.6	424.7	380.1
30.07	528.2	470.3	418.3
39.62	584.1	518.6	458.0
49.85	672.6	591.5	519.5
60.20	780.7	679.9	589.6
70.14	912.5	787.0	677.1
79.72	1077.7	916.5	786.6
90.11	1309.0	1095.4	924.6
100.00	1627.1	1304.3	1088.7

Methyl ethyl ketone (C_4H_8O) + Acetic acid
($C_2H_4O_2$)

Udovenko, 1939

mol%	d		
	25°	35°	45°
0.00	0.7989	0.7885	0.7781
10.06	0.8170	0.8068	0.7964
20.03	0.8361	0.8258	0.8154
30.11	0.8561	0.8459	0.8355
40.19	0.8772	0.8667	0.8563
50.31	0.9000	0.8893	0.8790
60.06	0.9239	0.9133	0.9027
70.23	0.9510	0.9401	0.9292
79.85	0.9782	0.9676	0.9563
89.86	1.0086	0.9983	0.9879
100.00	1.0431	1.0322	1.0212

mol%	η		
	25°	35°	45°
0.00	389.5	354.7	321.3
10.06	431.2	390.5	352.1
20.03	473.7	425.5	383.2
30.11	526.6	469.7	419.6
40.19	583.2	517.3	460.1
50.31	650.7	573.0	505.8
60.06	725.9	634.6	559.0
70.23	815.2	713.2	620.3
79.85	908.5	790.2	684.5
89.86	1013.4	879.0	762.2
100.00	1115.0	960.9	832.8

Methyl ethyl ketone (C_4H_8O) + Propionic acid
($C_3H_6O_2$)

Othmer, 1943

mol %	
L	V
at b.t.	
100	100
95	84.4
90	70.8
80	48.2
70	31.7
60	19.4
50	12.1
40	7.4
30	4.5
20	2.5
10	1.1
0	0

Methyl ethyl ketone (C_4H_8O) + Capric acid
($C_{10}H_{20}O_2$)

Ralston and Hoerr, 1942

%	f. t.
29.7	0
50.0	10
76.0	20
98.5	30
100	30.92

Methyl ethyl ketone (C_4H_8O) + Undecanoic acid
($C_{11}H_{22}O_2$)

Ralston and Hoerr, 1942

%	f. t.
32.3	0
58.2	10
83.8	20
100	28.13

Methyl ethyl ketone (C_4H_8O) + Lauric acid
($C_{12}H_{24}O_2$)

Ralston and Hoerr, 1942

%	f. t.
10.3	0
19.8	10
39.2	20
66.8	30
94.8	40
100	43.86

Methyl ethyl ketone (C_4H_8O) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Ralston and Hoerr, 1942

%	f. t.
10.6	0
22.8	10
48.7	20
75.9	30
98.7	40
100	41.76

Methyl ethyl ketone (C_4H_8O) + Myristic acid ($C_{14}H_{28}O_2$)	Methyl ethyl ketone (C_4H_8O) + Margaric acid ($C_{17}H_{34}O_2$)																																		
Ralston and Hoerr, 1942	Ralston and Hoerr, 1942																																		
<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>4.1</td><td>0</td></tr> <tr><td>7.8</td><td>10</td></tr> <tr><td>15.5</td><td>20</td></tr> <tr><td>35.1</td><td>30</td></tr> <tr><td>65.4</td><td>40</td></tr> <tr><td>92.4</td><td>50</td></tr> <tr><td>100</td><td>53.78</td></tr> </table>	%	f. t.	4.1	0	7.8	10	15.5	20	35.1	30	65.4	40	92.4	50	100	53.78	<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>0.71</td><td>0</td></tr> <tr><td>2.8</td><td>10</td></tr> <tr><td>6.8</td><td>20</td></tr> <tr><td>16.8</td><td>30</td></tr> <tr><td>43.7</td><td>40</td></tr> <tr><td>74.2</td><td>50</td></tr> <tr><td>98.6</td><td>60</td></tr> <tr><td>100</td><td>60.94</td></tr> </table>	%	f. t.	0.71	0	2.8	10	6.8	20	16.8	30	43.7	40	74.2	50	98.6	60	100	60.94
%	f. t.																																		
4.1	0																																		
7.8	10																																		
15.5	20																																		
35.1	30																																		
65.4	40																																		
92.4	50																																		
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2.8	10																																		
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74.2	50																																		
98.6	60																																		
100	60.94																																		
Methyl ethyl ketone (C_4H_8O) + Pentadecanoic acid ($C_{15}H_{30}O_2$)	Methyl ethyl ketone (C_4H_8O) + Stearic acid ($C_{18}H_{36}O_2$)																																		
Ralston and Hoerr, 1942	Ralston and Hoerr, 1942																																		
<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>4.1</td><td>0</td></tr> <tr><td>8.0</td><td>10</td></tr> <tr><td>16.7</td><td>20</td></tr> <tr><td>41.2</td><td>30</td></tr> <tr><td>71.9</td><td>40</td></tr> <tr><td>96.3</td><td>50</td></tr> <tr><td>100</td><td>52.49</td></tr> </table>	%	f. t.	4.1	0	8.0	10	16.7	20	41.2	30	71.9	40	96.3	50	100	52.49	<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>0.25</td><td>0</td></tr> <tr><td>1.01</td><td>10</td></tr> <tr><td>2.9</td><td>20</td></tr> <tr><td>7.6</td><td>30</td></tr> <tr><td>19.7</td><td>40</td></tr> <tr><td>41.8</td><td>50</td></tr> <tr><td>77.2</td><td>60</td></tr> <tr><td>100</td><td>69.20</td></tr> </table>	%	f. t.	0.25	0	1.01	10	2.9	20	7.6	30	19.7	40	41.8	50	77.2	60	100	69.20
%	f. t.																																		
4.1	0																																		
8.0	10																																		
16.7	20																																		
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Methyl ethyl ketone (C_4H_8O) + Palmitic acid ($C_{16}H_{32}O_2$)	Methyl ethyl ketone (C_4H_8O) + Oleic acid ($C_{18}H_{34}O_2$)																																		
Ralston and Hoerr, 1942	Hoerr and Harwood, 1952																																		
<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>0.90</td><td>0</td></tr> <tr><td>2.9</td><td>10</td></tr> <tr><td>7.8</td><td>20</td></tr> <tr><td>17.9</td><td>30</td></tr> <tr><td>39.8</td><td>40</td></tr> <tr><td>69.3</td><td>50</td></tr> <tr><td>96.0</td><td>60</td></tr> <tr><td>100</td><td>62.41</td></tr> </table>	%	f. t.	0.90	0	2.9	10	7.8	20	17.9	30	39.8	40	69.3	50	96.0	60	100	62.41	<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>1.0</td><td>-40</td></tr> <tr><td>2.5</td><td>-30</td></tr> <tr><td>7.9</td><td>-20</td></tr> <tr><td>25.1</td><td>-10</td></tr> <tr><td>62.9</td><td>0</td></tr> <tr><td>89.8</td><td>10</td></tr> </table>	%	f. t.	1.0	-40	2.5	-30	7.9	-20	25.1	-10	62.9	0	89.8	10		
%	f. t.																																		
0.90	0																																		
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89.8	10																																		
Methyl ethyl ketone (C_4H_8O) + Linoleic acid ($C_{18}H_{32}O_2$)	Methyl ethyl ketone (C_4H_8O) + Linoleic acid ($C_{18}H_{32}O_2$)																																		
Ralston and Hoerr, 1952	Hoerr and Harwood, 1952																																		
<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>4.3</td><td>-50</td></tr> <tr><td>9.5</td><td>-40</td></tr> <tr><td>27.0</td><td>-30</td></tr> <tr><td>64.9</td><td>-20</td></tr> <tr><td>92.4</td><td>-10</td></tr> </table>	%	f. t.	4.3	-50	9.5	-40	27.0	-30	64.9	-20	92.4	-10	<table> <tr><th>%</th><th>f. t.</th></tr> <tr><td>4.3</td><td>-50</td></tr> <tr><td>9.5</td><td>-40</td></tr> <tr><td>27.0</td><td>-30</td></tr> <tr><td>64.9</td><td>-20</td></tr> <tr><td>92.4</td><td>-10</td></tr> </table>	%	f. t.	4.3	-50	9.5	-40	27.0	-30	64.9	-20	92.4	-10										
%	f. t.																																		
4.3	-50																																		
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27.0	-30																																		
64.9	-20																																		
92.4	-10																																		

Methylpropylketone ($C_5H_{10}O$) + Formic acid (CH_2O_2)			
Lecat, 1949			
%	b.t.	Dt mix.	
0	102.35	-	-
32	105.5 Az	-	-
35	-	+3.9	-
100	100.75	-	-
Udovenko, 1939			
mol%	d		
	25°	35°	45°
0.00	0.8017	0.7917	0.7827
10.02	0.8171	0.8074	0.7988
19.98	0.8352	0.8252	0.8152
30.16	0.8561	0.8462	0.8361
39.92	0.8798	0.8693	0.8593
48.81	0.9044	0.8940	0.8836
59.74	0.9411	0.9304	0.9201
71.86	0.9937	0.9823	0.9715
83.92	1.0632	1.0521	1.0406
87.01	1.0864	1.0751	1.0633
100.00	1.2144	1.2017	1.1896
mol%	η		
	25°	35°	45°
0.00	467.3	419.7	378.2
10.02	504.3	451.9	408.5
19.98	547.9	487.6	434.4
30.16	603.7	532.7	471.3
39.92	668.9	586.0	514.6
48.81	734.8	542.4	558.9
59.74	841.8	729.4	633.1
71.86	1002.9	853.2	732.5
83.92	1198.3	1010.6	860.7
87.01	1261.7	1058.3	898.2
100.00	1627.1	1304.3	1088.7
Methyl propyl ketone ($C_5H_{10}O$) + Acetic acid ($C_2H_4O_2$)			
Udovenko, 1939			
mol%	d		
	25°	35°	45°
0.00	0.8017	0.7919	0.7827
9.97	0.8162	0.8066	0.7970
19.96	0.8320	0.8220	0.8120
29.89	0.8489	0.8393	0.8295
39.83	0.8674	0.8578	0.8477
50.13	0.8892	0.8790	0.8689
60.17	0.9121	0.9021	0.8920
69.87	0.9380	0.9274	0.9170
80.81	0.9684	0.9578	0.9471
89.22	1.002	0.9890	0.9783
100.00	1.0431	1.0322	1.0212

mol %	η		
	25°	35°	45°
0.00	467.3	419.7	378.2
9.97	507.4	455.1	406.1
19.96	548.2	488.2	433.9
29.89	592.3	524.6	463.9
39.83	640.1	565.5	498.9
50.13	698.6	613.4	539.4
60.17	762.8	667.0	583.8
69.87	839.0	727.0	635.0
80.81	922.5	800.6	696.1
89.22	1011.0	878.0	751.9
100.00	1115.0	960.9	832.8
Methylisopropylketone ($C_5H_{10}O$) + Formic Acid (CH_2O_2)			
Lecat, 1949			
%	b.t.	Dt mix.	
0	95.4	-	-
85	102.15 Az	-	-
90	-	+1.5	-
100	10 .75	-	-
Methylisobutylketone ($C_6H_{12}O$) + Acetic acid ($C_2H_4O_2$)			
Othmer, 1943			
L	mol%	V	b.t.
100		100	118.1
95		94.91	118.06
90		89.92	118.02
80		79.97	117.94
70		69.95	117.84
60		59	117.73
50		48.80	117.65
40		38.30	117.52
30		27.80	117.32
20		17.60	116.96
10		8.90	116.38
0		0	115.80

Methyl amyl ketone ($C_7H_{14}O$) + Acetic acid
 $C_2H_4O_2$)

Othmer, 1943

mol% (b.t.)			
L	V	L	V
0	0	50	74.5
5	12.7	60	81.0
10	22.8	70	86.9
20	44.0	80	91.8
30	58.2	90	96.1
40	67.3	100	100.0

Othmer and Benenati, 1945

mol% b.t.			mol% b.t.		
L	V	b.t.	L	V	b.t.
5.0	12.7	147.5	55.8	76.4	131.1
18.0	32.0	145.0	60.0	80.0	130.0
26.3	45.3	141.9	63.4	82.7	129.1
34.2	58.2	138.0	64.8	83.5	127.3
39.1	62.0	136.8	68.7	86.4	126.5
43.3	66.5	135.0	72.0	88.2	125.8
49.3	71.7	132.9	75.7	89.9	124.5
53.0	74.1	132.1			

mol%		mol%	
L	n_D	L	n_D
18°			
0	1.4118	60	1.3979
10	1.4102	70	1.3933
20	1.4084	80	1.3880
30	1.4065	90	1.3815
40	1.4044	100	1.3724
50	1.4016		

Diethylketone ($C_5H_{10}O$) + Formic Acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix
0	102.05	-
33	105.25 Az	-
55	-	+3.7
100	100.75	-

Pinacolin ($C_6H_{12}O$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix.
0	106.2	-
24	107.1 Az	-
25	-	+3.0
100	100.75	-

Diketene ($C_4H_6O_2$) + Acetic acid ($C_2H_4O_2$)

Dinaburg and Porai-Koshits, 1955

mol%		mol%	
L	V	L	V
b.t. (50mm)			
10.6	19.2	66.0	69.4
21.6	37.9	74.9	78.6
34.1	49.4	85.1	86.0
52.6	57.4	91.8	92.6
56.0	64.4		

wt%	n_D	wt%	n_D
20°			
0	1.4384	70	1.3915
10	.4314	80	.3853
20	.4248	85	.3822
30	.4179	90	.3794
40	.4107	95	.3765
50	.4048	100	.3745
60	.3983		

Diacetyl ($C_4H_6O_2$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol%		b.t.
L	V	
100	100	118.1
98	97	116.8
97	94.7	116.0
95	90.8	114.5
90	80.4	111.0
80	61.5	104.0
70	47.3	101.1
60	39.7	99.0
50	28.3	97.1
40	21.4	95.4
30	15.3	93.9
20	10.2	92.5
10	5.3	91.2
0	0	88.0

Diisobutyl ketone ($C_5H_{10}O$) + Acetic acid
($C_2H_4O_2$)

Othmer, 1943

mol%		(b.t.)	
L	V	L	V
0	0	50	87.8
2	16.0	60	91.0
5	29.4	70	93.3
10	44.6	80	96.3
20	62.1	90	98.5
30	74.6	100	100.0
40	83.0		

Cyclohexanone ($C_6H_{10}O$) + Isobutyric acid
Lecat, 1949 ($C_4H_8O_2$)

%	b.t.
0	155.7
-	152.5 Az
100	100.75

Methylcyclohexanone ($C_7H_{12}O$) + Acetic acid
Othmer, 1943 ($C_2H_4O_2$)

mol%		b.t.
L	V	
0	0	165.0
5	18.9	162.0
10	33.1	158.9
20	53.5	152.0
30	67.2	145.0
40	77.7	139.0
50	84.9	134.0
60	89.7	129.5
70	93.4	126.0
80	96.3	122.8
90	98.5	119.5
100	100.0	118.1

Fenchone ($C_{10}H_{16}O$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol%		b.t.
L	V	
0	0	193.0
2	22.5	181.0
10	46.1	175.2
20	81.7	152.0
30	88.8	143.0
40	93.5	136.0
50	96.4	131.0
60	98.0	127.0
70	98.9	124.0
80	99.3	121.5
90	99.6	119.5
100	100.0	118.1

Camphor ($C_{10}H_{16}O$) + Formic acid (CH_2O_2)

Golse, 1911

%	d	n_D
	20°	
100	1.2201	1.3709
91.56	1.1881	1.3794
82.73	1.1579	1.3891
73.44	1.1313	1.3971
63.69	1.1026	1.4063
53.46	1.0746	1.4175

Camphor ($C_{10}H_{16}O$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	f.t.
100	16.4
99.50	16.27
97.55	15.77
92.98	14.575
89.51	13.63
85.39	12.45
80.66	11.04
77.29	9.96

Pushin and Rikovski, 1948

mol%	f.t.	E
0	178	-
20	125	-
35	78.5	-11
50	32.5	-10
60	-3	-11
62	-10	-10
70	-3.5	-11
80	+3	-11
90	9.5	-
100	16.7	-

Landolt, 1876 - 1877

%	d
	20°
34.7481	0.98983
60.2817	1.01128
84.1181	1.03389
100	1.0502

Winther, 1907		
%	d	
20°		
66.743	1.01738	
96.023	1.04584	
96.854	1.04669	
97.855	1.04782	
98.873	1.04882	
100	1.04998	
Golse, 1911		
%	d	
20°		
50.11	1.0022	
60.46	1.0115	
70.55	1.0211	
80.60	1.0508	
90.36	1.0397	
100	1.0495	
Malosse, 1912		
%	d	
20°		
40	0.9973	
50	1.0061	
60	1.0149	
70	1.0235	
80	1.0328	
90	1.0414	
100	1.0502	
Golse, 1911		
mol%	n _D	
20°		
50.11	1.4221	
60.46	1.4115	
70.55	1.4010	
80.60	1.3913	
90.36	1.3811	
100	1.3713	

Landolt, 1876 - 1877			
%	(α) _D		
20°			
34.7481	+50.801		
60.2817	47.181		
84.1181	44.021		
100	-		
Winther, 1907			
%	(α) _D		
20°			
66.743	+45.66		
97.023	42.33		
96.854	41.81		
97.855	41.3		
98.873	40.9		
100	-		
Colours	(α)		
	66.743%	96.023%	97.855%
20°			
red	33.10	30.68	31.2
yellow	45.66	42.33	41.3
green	61.86	57.80	57.0
pale blue	101.70	96.26	94.6
dark blue	122.65	117.19	114.7
Camphor (C ₁₀ H ₁₆ O) + Propionic acid (C ₃ H ₆ O ₂)			
Golse, 1911			
%	d	n _D	
20°			
100	0.9948	1.3847	
89.88	0.9921	1.3940	
79.18	0.9893	1.4026	
69.60	0.9868	1.4123	
59.34	0.9844	1.4213	
49.04	0.9810	1.4309	

Camphor ($C_{10}H_{16}O$) + Caproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b.t.
0	209.1
-	204.0 Az
100	205.15

Camphor ($C_{10}H_{16}O$) + Palmitic acid ($C_{16}H_{32}O_2$)

Efremov, Vinogradov and Tikhomirova, 1937

%	mol%	f.t.	E
100	100	59.2	-
95	91.85	55.7	-
90	84.23	53.4	-
85	77.50	51.5	42.3
80	70.78	48.3	45.3
75	64.42	45.8	-
70	58.06	54.0	45.8
65	52.63	62.7	45.7
60	47.19	71.1	44.5
55	42.21	80.0	44.0
50	37.23	88.1	43.7
45	32.78	97.2	43.0
40	28.33	107.7	41.1
35	24.30	115.5	40.2
30	20.27	124.2	40.0
25	16.37	133.9	39.5
20	12.47	142.0	38.2
15	9.32	150.5	38.0
10	6.18	160.1	30.5
5	3.09	169.8	-
0	0	178.0	-

Camphor ($C_{10}H_{16}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Efremov, 1929 - 1930

%	f.t.	E	min.	tr.t.
100	67.7	-	-	-
95	64.9	-	-	-
90	62.4	-	-	-
85	61.0	-	-	-
80	58.4	-	-	-
75	58.0	47.8	150	-
70	57.0	55.8	390	-
65	65.1	56.3	540	-
60	74.4	56.3	480	-
55	85.0	56.2	390	-
50	93.5	56.4	330	-
40	101.0	56.3	270	90.3
35	113.2	56.3	240	91.2
30	127.7	56.2	210	92.5
25	135.8	53.7	180	93.0
20	144.4	52.2	150	94.3
15	152.2	49.2	100	94.5
10	161.1	47.2	-	95.5
5	169.0	-	-	97.3
0	178.0	-	-	98.0

Camphor ($C_{10}H_{16}O$) + Oleic acid ($C_{18}H_{34}O_2$)

Castiglioni, 1933

%	d	η
	20°	
100	0.8958	3056.7
95	0.9001	2981.1
90	0.9025	2919.7
85	0.9050	2815.7
80	0.9081	2734.1
75	0.9165	2589.3

Camphor ($C_{10}H_{16}O$) + Desoxycholic acid ($C_{24}H_{40}O_4$)

Rheinboldt, König and Flume, 1929

%	f.t.	E
0.0	176.5	176.0
10.1	168.0	153.5
18.0	161.0	"
30.4	161.5	153.0
40.0	168.5	"
51.4	174.5	153.5
65.0	178.0	157.0
70.0	178.5	168.0
76.3	178.5	164.0
81.2	176.5	164.0
84.8	174.0	"
90.3	171.0	"
94.7	168.0	"
100.0	172.0	168.5

(1+1)

Camphor ($C_{10}H_{16}O$) + Apocholic acid ($C_{24}H_{38}O_4$)

Rheinboldt, König and Flume, 1929

%	f.t.	E
0.0	176.5	176.0
9.5	169.0	154.5
16.4	160.0	154.0
22.4	162.0	"
27.7	166.0	"
39.6	172.5	"
50.4	177.5	"
59.8	179.0	"
70.9	179.5	164.0
75.9	178.5	162.0
78.7	177.0	"
89.8	172.0	"
94.9	169.0	"
100.0	172.0	168.0(1+1)

Camphor ($C_{10}H_{16}O$) + Chloracetic acid ($C_2H_3O_2Cl$)

Pawlewski, 1893 and 1899

mol%	f. t.	mol%	f. t.
0	175	85.83	39.3
22.03	106	88.12	41
28.63	75	91.12	42.7
34.87	40	93.40	44.2
40.87	-	94.42	46
66.93	-	96.71	46.2
70.57	23.1	98.38	47.8
74.78	27.5	99.81	50.5
81.01	33	100	63
82.86	35.5		

Pushin and Rikovski, 1948

mol%	f. t.	E
0	178	-
10	148	-
20	107	-
30	61	-23
35	26	-28
40	-18	-18
45	-6	-23
50	+4	-19
60	21.5	-24
70	37	-
80	47	-
90	56	-
100	62	-

Camphor ($C_{10}H_{16}O$) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Pushin and Rikovski, 1948

mol%	f. t.	mol%	f. t.
0	178	55	-31
10	139	60	-38
20	92	70	-26
30	+11	80	-8
40	-39	90	+5
45	-32	100	11.5
50	-29		

Camphor ($C_{10}H_{16}O$) + Trichloroacetic acid
($C_2HCl_3O_2$)

Kitran, 1924

mol%	f. t.
33	22.3 E
50	62 (1+1)
70	6.7 E

Pushin and Rikovski, 1940 - 1946

mol%	f. t.	E	mol%	f. t.
100	57	-	37	41
85	42	7	36	37
75	22.5	7	35	39
70	9	7	33	42
69	7	7	32	47
65	28	6	30	51
55	58	-	25	70
50	66	-	15	123
45	60	-	0	178
40	50	-		

(1+1)

Camphor ($C_{10}H_{16}O$) + Benzoic acid ($C_7H_6O_2$)

Jouniaux, 1912

mol%	f. t.	E	min.	tr. t.
0	178	-	-	-
5	161.8	-	-	-
10	145.5	-	-	-
20	112.8	-	-	-
30	80.2	56.1	0.59	-
40	60.4	57.2	0.71	-
50	73.5	57.2	0.57	-
60	85.3	57.2	0.43	-
70	95.3	57.2	0.28	-
80	105.2	57	0.17	-
90	113.3	57	-	-
95	117.2	91	-	10.2
100	121.2	-	-	-

Efremov, 1915

%	mol%	f. t.	E
0	0	178	-
2.42	3.00	168.4	-
4.05	5.00	162.2	55.0
8.18	9.99	146.0	56.0
16.71	20.01	115.1	57.0
21.15	25.06	100.0	57.1
25.60	30.02	84.5	56.0
30.17	35.03	66.5	56.5
32.50	37.50	56.5	-
34.86	40.03	60.1	56.6
39.69	45.08	66.6	57.0
44.52	50.00	73.0	56.6
54.63	60.01	86.5	56.6
65.16	69.98	97.0	56.5
76.25	80.01	106.1	56.0
87.84	90.00	114.0	56.5
93.85	95.00	117.6	47.2
96.83	97.44	119.7	65.0
100	100	121.4	-

tr. t. 0-20 mol% 95.8°- 98.1°

Camphor ($C_{10}H_{16}O$) + Cinnamic acid ($C_9H_8O_2$)

Efremov, 1916

mol%	f.t.	
0	178.0	
36.6	71.5	E
100	133.0	
tr.t. 0 - 20%	98°	

Camphor ($C_{10}H_{16}O$) + Salicylic acid ($C_7H_6O_3$)

Efremov, 1915

%	f.t.	E	%	f.t.	E
0	178.0	-	42.62	93.5	56.0
2.73	168.0	-	47.58	107.0	55.0
4.56	161.6	50	57.66	121.7	55.0
9.18	144.4	51.0	67.93	132.5	55.0
13.84	125.0	51.5	78.41	139.5	55.0
18.50	105.1	53.5	89.10	147.8	-
23.23	88.8	55.0	94.45	153.1	-
28.01	64.5	55.0	96.72	154.4	-
32.85	60.0	55.0	100	156.2	-
37.70	76.8				

Le Fevre and Tideman, 1931

mol%	f.t.	mol%	f.t.
0	178.0	29.4	55.3
1.6	173.2	29.5	55.2
2.6	171.0	30.5	54.3
4.6	165.0	31.0	54.1
6.4	158.0	32.0	55.1
10.9	143.0	42.5	92.0
17.1	117.0	52.4	110.9
22.7	88.0	62.2	126.0
24.6	75.0	72.7	136.3
27.3	56.0	81.3	143.1
27.6	55.0	89.9	148.0
28.3	53.3	100.0	157.3

Acetophenone (C_8H_8O) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	f.t.
100	16.4
99.35	16.195
98.19	15.835
95.58	15.020
92.22	13.955
88.63	12.805
85.32	11.795
80.71	10.230
78.05	9.365

Vandoni and Chazeau, 1948

mol%	f.t.
0	19.62
2.41	18.64
4.53	17.65
16.07	13.55
31.50	7.71
50.32	-0.70

Kendall and Brakeley, 1921

mol%	d	η
25°		
0	1.0263	1681
9.98	1.0272	1740.7
21.07	1.0287	1753.6
29.35	1.0300	1742
42.53	1.0325	1703
48.85	1.0338	1668
60.03	1.0365	1598
69.98	1.0390	1524
80.02	1.0420	1420
90.13	1.0453	1293
100	1.0499	1121

Kendall and Gross, 1921

mol%	n	mol%	n
25°			
0	0.00055	57.22	0.00320
6.91	0.00286	65.87	0.00283
16.39	0.00333	69.68	0.00259
25.39	0.00351	77.20	0.00226
33.29	0.00358	82.79	0.00175
40.98	0.00346	90.74	0.00111
49.55	0.00344	100	0.00024

p-Methylacetophenone ($C_9H_{10}O$) + Heptanoic acid
($C_7H_{14}O_2$)

Lecat, 1949

%	b. t.
0	226.35
70	221.2 Az
100	222.0

Benzophenone ($C_{13}H_{10}O$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.
99.15	-0.18
96.85	0.66
92.10	1.58
88.86	2.31
83.12	3.22
75.70	4.62
65.83	5.96

Raoult, 1890

mol%	100 · (p ₂ - p)/p ₂
	118°
96.707	4.902
93.573	8.741
83.452	15.180

Benzophenone ($C_{13}H_{10}O$) + Lauric acid ($C_{12}H_{24}O_2$)

Eykman, 1889

%	f. t.
100	43.4
96.12	42.49
93.085	41.82
88.91	40.94
92.73	39.69
77.4	38.81

Benzophenone ($C_{13}H_{10}O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	41.6	-1.0
89.7	49.7	36.6	+10.1
81.4	40.3	28.4	22.4
74.5	28.5	22.4	30.2
68.6	16.2	13.9	38.2
62.5	0.4	0	46.3

Benzil ($C_{14}H_{10}O_2$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	61.4	34.2	79.0
90.0	56.3	18.0	86.6
80.2	51.6	13.0	88.6
67.1	58.3	9.9	89.9
57.8	65.3	0	94.0
43.6	74.0		

Benzil ($C_{14}H_{10}O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	47.5	55.3
91.4	50.9	39.5	65.3
81.2	39.8	30.4	73.8
75.8	35.3	22.0	80.8
69.9	21.5	12.2	87.0
62.0	31.2	0	94.0
54.4	45.0		

Benzil ($C_{14}H_{10}O_2$) + Benzoic acid ($C_7H_6O_2$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	121.4	36.2	79.5
86.2	111.8	25.8	83.1
75.1	104.9	19.4	86.6
66.8	98.3	9.9	90.8
53.8	88.5	0	94.0
45.4	81.7		

Passerini, 1924

%	f.t.	E	min.	E unst.	min.
0	95	-	-	-	-
6.7	90	-	-	-	-
13.4	85	78	4	-	-
20	82	78	5	-	-
26.7	78	78	8	-	-
33.4	83	78	12	-	-
40	88	78	9	-	-
49.4	91	78	8	-	-
46.7	93	78	7	-	-
50	96	78	6	-	-
53.4	98	78	5	-	-
60	102	78	3	-	-
62.2	103	78	2.30	-	-
64.5	104	78	2	-	-
66.7	106	78	1.30	-	-
70.1	107	78	1	-	-
73.4	108	-	-	75	5'
76.7	110	-	-	75	4'
79.9	112	-	-	75	3:3
86.7	115	-	-	75	2'
93.4	117	-	-	-	-
100	120	-	-	-	-

Sorun and Durand, 1952

%	f.t.
0	94.0
-	78.0 E
100	121.4

Dibenzalacetone ($C_{17}H_{14}O$) + Chloracetic acid
($C_2H_3O_2Cl$)

Kendall and Gibbons, 1915

mol%	f.t.	mol%	f.t.
100	61.4	68.4	33.0
92.7	56.5	65.0	42.9
86.3	50.5	61.9	51.0
82.0	46.2	58.7	58.0
77.3	41.5	53.6	67.0
72.3	36.1	49.3	74.0

Dibenzalacetone ($C_{17}H_{14}O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	* f.t.	mol%	f.t.
100	57.3	75.3	87.0 (1+1)
90.0	48.3	71.4	97.8
89.0 (1+2)	51.6	68.5	102.8
87.5	58.1	62.9	110.2
86.3	61.9	60.6	112.2
83.6	70.0	57.0	114.5
81.3	73.8	54.4	115.2
79.0	78.3	50.0	116.6
76.5	82.6	45.0	117.0
71.3	85.2	40.2	115.0
(1 + 2) (1 + 1)			

Dibenzalacetone ($C_{17}H_{14}O$) + Phenylacetic acid
($C_8H_8O_2$)

Pfeiffer, 1924

%	f.t.	%	f.t.
0	110 - 112	59	58
13.5	99	68.3	60
20	92	78.9	65
36.6	77	91.8	72
50.4	64	100	76
58.2	58		

Dianisalacetone ($C_{19}H_{18}O_3$) + Benzoic acid
($C_7H_6O_2$)

Pfeiffer, 1924

%	f.t.	%	f.t.
100	121	46.7	95
92.5	121 - 122	42	91 - 92
85.1	119	38.5	85
74.1	113 - 114	37.3	99
65.7	109	18.3	111
57.7	104	0	129
50.9	100		

Dianisalacetone ($C_{19}H_{18}O_3$) + Phenylacetic acid
($C_8H_8O_2$)

Pfeiffer, 1924

%	f.t.	%	f.t.
0	129	66.2	64 - 65
21.9	109	67.9	66 - 67
34.2	94 - 95	82.6	71
45.1	81 - 83	91.9	74
56.9	64 - 65	100	76

Phenyl anisyl ketone ($C_{14}H_{12}O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
0	58.7	67.8	4.3
13.0	53.9	74.4	22.5
20.3	48.2	80.6	34.5
28.0	41.3	86.9	44.8
35.2	31.7	92.9	52.4
45.5	7.4	100	57.9

p-Acetylbiophenyl ($C_{14}H_{12}O$) + p-Toluic acid ($C_8H_8O_2$)

Pfeiffer, Angern and al., 1930

%	f. t.	E
100	178	176
90	173.5	103.5
80	167.5	103
70	161	103
60	155	103
50	148	103.5
40	138.5	103.5
30	123	103.5
20	108	103
10	114	103
0	121	118.5

Quinone ($C_6H_4O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.9	46.9	48.3
91.7	52.1	39.8	63.9
84.7	44.9	29.9	81.4
77.3	34.4	20.9	94.6
70.5	22.2	11.5	105.1
62.2	2.6	0	114.6
55.0	24.6		

1-Methoxyanthraquinone ($C_{15}H_{10}O_3$) + p-Toluic acid ($C_8H_8O_2$)

Pfeiffer, Augern and al., 1930

%	f. t.	m. t.
100	178	176
90	174	136.5
80	169	136.5
70	164	136.5
60	156.5	136.5
50	149.5	136.5
40	141.5	137
30	148	136.5
20	155	136.5
10	162	137
0	169.5	167.5

Anthraquinone derivatives + Meconic acid ($C_7H_4O_7$)

Neuhaus, 1945

Crystallographic studies of partially isomorphous systems.

Piperonal ($C_8H_6O_3$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Mameli and Mannessier, 1913

mol%	f. t.	mol%	f. t.
I		II	
100	61.80	100	56.53
98.18	61.10	97.52	55.62
96.80	60.50	93.79	54.17
93.39	59.19	89.67	52.36
86.07	56.02	82.20	48.89
80.93	53.46	78.95	47.20
64.01	43.51	73.77	44.27
59.82	39.89	69.93	41.30
54.73	34.31	63.75	37.08
52.36	32.20	61.57	34.21
49.97	28.43	56.79	30.14
45.32	24.16	53.83	26.52
41.74	18.08	49.53	22.71
40.51	16.37	47.84	18.40
39.71	14.97	38.49	4.52
38.74	12.65	38.31	3.31
37.46	9.74	37.81	2.36
36.83	8.58	37.09	-0.65
34.73	4.71	36.51	-1.30
34.19	3.26	36.25	-2.80
32.78	-0.30	30.50	-0.30
32.27	-3.30	28.45	+3.71
29.71	+1.10	26.05	7.53
27.37	6.42	12.11	24.31
23.46	12.15	6.47	29.54
9.93	26.53	0	35.37
6.47	31.40		
0	35.37		

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	61.4	49.7	17.8
91.7	56.6	44.3	14.5
84.9	52.2	39.7	10.2
78.9	47.2	35.8	11.0
73.6	42.4	25.8	18.7
69.0	37.5	19.3	23.8
65.1	33.0	8.2	31.0
60.4	28.4	0	35.5
52.9	22.0		

Piperonal ($C_8H_6O_3$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
		53.5	33.2
100	57.3	51.0	34.9
90.3	49.7	50.3	35.0
82.4	40.1	48.3	34.8
76.3	30.8	43.5	32.7
75.5	29.3	39.4	29.9
69.8	17.5	35.3	26.8
		33.0	24.8
		25.2	18.7
74.4	33.5		
72.2	36.2	30.0	13.7
68.7	37.3	28.1	16.2
67.3	37.4	25.2	18.7
65.2	36.9	17.3	24.4
64.4	36.1	11.6	28.7
59.0	33.3	0	35.5
54.0	29.0		

(1 + 2)

Pushin and Rikovski, 1940 - 1946

mol%	f. t.	E
stable	metast.	
100	57	-
90	49.5	-
80	37	31
75	34.5	31
70	36.5	19
66.7	37	- (2 + 1)
63	36	-
60	34.5	-
57	32.5	-
55	31.5	30
52.5	32.5	-
50	33.5	23.5 - (1 + 1)
45	33	-
40	31	-
30	23	18
25	18	18
20	23	16
10	31	-
0	36.5	-

Piperonal ($C_8H_6O_3$) + Benzoic acid ($C_7H_6O_2$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	121.4	30.0	54.6
86.2	111.0	25.9	48.4
80.6	106.6	22.1	39.7
73.1	100.8	18.7	32.0
65.5	94.2	18.5	27.2
59.2	89.0	17.0	27.4
50.0	81.0	10.2	30.8
44.2	74.2	0	35.5
37.4	65.5		

Passerini, 1924

mol%	f. t.	E	min.	Eunst.	min.
0	37	-	-	-	-
6.7	32	28	11	-	-
14.4	28	28	9	-	-
20	42	28	7	-	-
26.7	54	28	6	-	-
33.4	64	28	5	-	-
40	73	28	3	-	-
46.7	31	-	-	26	6
53.4	88	-	-	26	5
60	94	-	-	26	4
66.7	99	-	-	26	3
73.4	104	-	-	26	3
80	109	-	-	26	2
86.7	113	-	-	-	-
93.4	117	-	-	-	-
100	120	-	-	-	-

Coumarin ($C_9H_6O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1940 - 1946

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	57	-	36	31	24
90	50.5	-	35	33	24
80	37	7	33.3	36.5	23
75	28	7	30	42	22
68	15	7	27	46	18
65	12	8	25	48	20
60	18	-	22	52	15
50	23	-	20	54	18
40	24	-	10	62.8	-
38	26	24	0	68	-

(1+2)

Dimethylpyrone ($C_7H_8O_2$) + Formic acid (CH_2O_2)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.5	18.8
14.4	122.5	63.9	18.7
24	112.5	65.1	18.9
34.1	98.0	65.4	18.9
39.9	84.5	66.7	19.0
45.4	70.9	67	19.0
49.2	58.1	68.5	18.9
52.2	45.0	69.1	18.7
54.1	35.1	70.5	18.3
55.9	24.9	71.8	17.6
56.5	20.4	74	16.3
56.7	19.0	75	15.5
57.4	18.9	76.1	14.3
58.1	19.1	78.5	11.1
58.3	19.3	71.1	7.0
59.3	19.6	84.7	-0.3
59.5	19.5	86.4	-4.3
60	19.6	88	-5.5
60.4	19.5	91.7	0.0
61	19.6	94.3	3.1
61.5	19.4	100	8.5
62.7	19.2		

(2 + 3) (1 + 2)

Dimethylpyrone ($C_7H_8O_2$) + Acetic acid ($C_2H_4O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	65.1	23.8
12.9	125.5	66.6	22.4
25	115.0	71.5	15.6
35.2	102.5	76.1	7.5
42.8	88.6	79.6	-0.4
49.1	73.3	82.3	-2.0
53.4	61.1	84.7	2.1
56.8	50.3	91	9.6
60.4	37.3	100	16.4
62.5	28.3		

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Crotonic acid ($C_5H_6O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.2	47.5
12.4	125.5	67.2	44.1
23.9	116.5	71.3	39.2
37.2	100.7	78.7	49.4
45.4	86.0	84.2	56.7
50.1	75.2	91.0	63.6
54.6	62.3	100	71.0
59	50.0		

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Chloracetic acid
($C_2H_3O_2Cl$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	58.6	34.1
9.5	126.0	61.3	29.7
20.1	116.5	66.2	19.1
32.8	97.2	70	5.1
37.2	87.9	72.6	14.4
41.6	75.0	77	27.5
44.8	63.4	82.5	41.6
48.2	46.8	90.5	53.9
49.2	41.0	100 (I)	61.3
51.2	39.7	100 (II)	56.2
52.6	39.1	100 (III)	50.2
55	37.7		

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Dichloracetic acid
($C_2H_2O_2Cl_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	52.8	21.7
14.1	124.0	56.7	17.1
24.5	111.0	59.8	11.1
31	99.1	64.9	-4.1
36.4	85.3	68.6	-21.2
40.2	72.5	80	-23.8
43.6	56.6	85.9	-9.0
45.9	43.2	91.9	-0.8
48.5	26.0	100	-9.7 (I)
49.9	22.9	100	-4.1 (II)

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Trichloracetic acid
($C_2HO_2Cl_3$)

Plotnikov, 1911

%	f. t.	%	f. t.
0	130	53	43
30	110	65	67
40	95	81	32
45	43	90	52
50	48	100	59

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.1	63.8
15	124.5	64.5	65.6
28.6	110.0	66.2	66.7
33.9	99.2	68	66.1 (1+2)
38.9	83.8	70.5	63.0
42.4	67.1	72.9	58.1
44.5	52.9	76.4	49.3
47.3	43.0 (1+1)	80.3	33.5
50.1	44.8	81.0	12.5
52.4	44.0	83.5	28.1
54.6	41.4	87.1	41.0
54.6	36.4	92.5	51.5
56.8	46.9	100	57.2
59	54.6		

Plotnikov, 1915

%	f. t.	%	f. t.
100	56.8	58.8	38.8
96.8	54.0	57.9	37.7
93.3	49	57	42.9
91.8	43.8	56.5	41.5
91.1	41.7	56	37.9
90.5	39.7	55	36.8
89.7	37.2	52.3	42.3
88.2	30.8	51	54.2
87	27.1	50	78.1
83.3	34.7	46	89.1
81	47	44.1	93.1
78.5	56.5	40	99.4
76.2	61.4	35	107.0
73.5	64.4	30	113.0
71.5	63.8	25	118.0
69.6	61.2	20	121.7
66.2	54.0	15	124.6
62.3	48.0	10	127.5
59.4	48.0	0	131.5

Dimethylpyrone ($C_7H_8O_2$) + 2-Iodpropionic acid
($C_3H_5O_2I$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	62.2	8.8
15	123.5	68.4	35.4
24.3	108.0	72.7	45.1
35	87.4	76.2	52.2
42.8	67.2	79.5	58.4
49.7	44.0	88.3	70.9
55.6	18.4	100	81.2
58.8	8.9		

Dimethylpyrone ($C_7H_8O_2$) + Trichlorbutyric acid
($C_4H_5O_2Cl_3$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	63.4	35.1
10.2	127.0	65.7	33.5
18.4	121.0	67.3	33.7 (1+2)
26.8	110.2	69.5	33.0
32.9	98.0	72.4	30.2
35.2	91.8	76.6	25.0
38.5	82.1	71.9	-7.2
41.8	66.5	75.1	9.7
45.6	53.4	79.6	27.1
49.6	56.1(1+1)	82.7	37.1
53.9	53.8	86.9	45.9
58.8	47.8	92.5	53.0
61.2	42.5	100	57.9
63.2	35.2		

Dimethylpyrone ($C_7H_8O_2$) + Chlorcrotonic acid
($C_4H_5O_2Cl$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	62	38.5
10.5	125.5	62.4	38.0
21.4	115.0	62	39.0
31.8	100.1	64.4	46.3
37.2	89.6	64.7	47.4
41	78.5	65.5	49.9
45.9	60.8	68.2	57.3
48.8	46.5	71.7	65.4
50.5	45.7	74.1	71.1
53.3	45.1	81	82.8
56.7	43.9	89.6	92.9
59.3	41.7	100	99.0

Dimethylpyrone ($C_7H_8O_2$) + Trichlorlactic acid
($C_3H_3O_3Cl_3$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	60.7	46.9
10	126.5	63.2	43.6
22.3	113.0	66.1	38.5
30.8	92.9	66.1	21.2
35	77.1	70	43.2
37.8	65.1	73.2	59.3
41.5	49.5	78	83.0
44.7	52.7	83	95.4
49.5	54.4	89.9	106.6
55.1	52.6	100	113.8
58.2	49.8		

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Benzoic acid ($C_7H_6O_2$)

Kendall, 1914

%	f. t.	%	f. t.
0	132.1	52.6	50.2
10.5	127.0	54.1	49.6
18.9	120.0	56.2	48.5
25.8	111.5	58.7	54.8
31.5	102.4	62.1	66.8
36.5	93.1	65.3	76.7
41.1	82.6	69.1	85.6
44.1	74.2	74.7	95.2
47	63.8	81.9	105.2
49.5	53.5	90.5	113.6
50	50.5	100	120.8
50.6	50.5		

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	58.9	21.7
12	125.0	59.8	21.0
23.7	113.0	61.5	19.2
29.9	105.5	62	18.7
35.9	94.9	64	19.2
40	85.1	65.7	25.9
45.9	69.0	69.9	37.8
51.1	51.6	76.4	51.6
53	44.2	83.6	62.4
56.6	25.4	92	70.8
59.8	5.5	100	76.7

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Salicylic acid ($C_7H_6O_3$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	50.1	71.9
9.9	128.0	52.5	71.1
20.7	119.5	56.0	68.9
32.2	100.5	60.7	70.3
36.6	89.2	67.3	115.8
39.6	80.1	72.3	127.6
42.7	68.9	82.6	144.2
44.0	69.1	89.9	152.2
46.5	70.7	100	158.9
48.9	71.6		

(1+1)

Dimethylpyrone ($C_7H_8O_2$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	53.1	71.6
13.5	123.0	56.1	69.6
29.6	111.0	59.2	66.1
31.4	98.9	62.3	76.1
35.7	90.1	65.8	90.5
39.9	76.3	71.4	108.4
43	68.9	79.0	124.9
47.9	71.6	88.5	137.4
50.1	72.3	100	147.0

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + o-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	55.1	43.9
9.9	126.0	55.7	46.6
19.5	117.5	56.2	46.2
29.8	104.0	57.8	50.4
35.1	94.9	59.9	55.7
44.3	74.6	64.6	66.0
48.9	62.0	70.4	77.2
51.7	53.4	79.3	89.3
54.9	43.6	89.5	97.8
54.8	47.2	100	103.4

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + m-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	54.7	62.9
10	126.5	57.5	61.7
21	116.0	59.9	60.5
31.4	102.0	62.5	59.8
35.6	94.4	66.8	70.0
41.4	81.0	73.8	84.8
46	69.1	81.4	95.6
48.1	63.8	90.1	103.0
50.9	64.0	100	107.6

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + p-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	45	87.1
15.7	126.5	46.8	87.7
20.8	120.0	49.4	93.2
27.4	112.0	52.7	106.9
32.6	103.1	58.6	124.4
37	93.4	67.9	143.2
39.9	86.3	78.6	158.6
40.5	85.0	89.7	170.0
42.8	86.2	100	178.5

Dimethylpyrone ($C_7H_8O_2$) + Cinnamic acid ($C_9H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	51.8	73.1
9.8	126.5	55.4	72.4
19.0	119.5	56.5	75.0
28.1	107.8	59.7	87.0
35.7	95.7	63.7	97.4
39.4	88.4	69.5	109.0
43.1	79.9	75.2	116.4
45.7	72.7	84.1	126.3
48	73.1	90.9	131.8
50	73.2	100	136.8

(1 + 1)

Dimethylpyrone ($C_7H_8O_2$) + Hydrocinnamic acid
($C_9H_{10}O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	53	49.7
10.1	126.5	56.7	35.3
19.8	119.0	60.1	22.0
27.7	110.0	63.4	4.8
30.6	105.4	66.3	5.9
34	99.5	73.3	21.1
37	93.3	78.9	29.4
40.5	86.7	84.7	35.8
43.3	80.1	91.4	41.0
46.9	69.7	95	43.2
49.8	60.6	100	45.2

Dimethylpyrone ($C_7H_8O_2$) + Mandelic acid ($C_8H_8O_3$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	132.1	50	59.3
11.5	123.5	55.5	67.2
19	116.0	56.5	67.9
24	109.7	58.7	70.0
27.6	104.7	60.7	71.7
32.5	94.8	63.4	72.7
37.6	82.0	65.7	73.8
41.6	68.1	66.7	74.0
44.1	66.4	67.2	73.7
43.9	66.5	67.5	73.6
45.4	67.5	69.5	73.0
47.9	68.9	63.4	61.7
50	69.3	67.5	73.6
52.7	68.8	69.5	78.2
55.5	67.2	71.6	82.8
57.2	66.1	74.7	88.6
60.7	62.7	81.2	98.5
63.4	60.0	89.4	108.0
45.4	49.0	100	117.0

(1 + 1) (1 + 2)

Tetramethylphthalane ($C_{12}H_{16}O$) + o-Toluic acid
($C_8H_8O_2$)

Bennett and Wain, 1936

mol%	f. t.	E	mol%	f. t.	E
100	104.7	103.9	43.7	62.6	49.5
80.2	92.6	49.2	35.9	54.1	49.2
69.8	85.1	49.4	25.2	55.5	49.3
59.9	76.5	49.4	11.9	65.5	49.6
49.9	68.4	49.3	0	72.1	71.1

Tetramethylphthalane ($C_{12}H_{16}O$) + Phenylacetic acid ($C_8H_8O_2$)

Bennett and Wain, 1936

mol%	f. t.	E	mol%	f. t.	E
100	77.7	76.8	45.9	40.1	36.8
90.1	73.1	37.4	40.5	46.5	36.9
80.1	66.4	37.2	29.4	55.0	37.1
70.2	59.1	36.9	21.2	60.6	37.0
61.1	51.8	37.0	9.7	67.4	37.1
51.1	41.8	37.1	0	72.1	31.1

XXX. ANHYDRIDES AND ESTERS + HYDROXYL DERIVATIVES .

Acetic anhydride ($C_4H_6O_3$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
	20°					
49.974	-4.78	-5.78	-6.48	-7.26	-7.56	-7.78
24.987	-4.64	-5.52	-6.20	-6.88	-7.28	-
12.4935	-4.48	-5.36	-6.08	-6.72	-7.12	-
4.824	-5.60	-7.05	-7.88	-8.71	-9.12	-9.54
2.412	-5.80	-7.46	-8.29	-9.12	-9.54	-

Acetic anhydride ($C_4H_6O_3$) + 8-Oxyquinoline
(C_9H_7ON)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	
0	-72	
20	+24	
40	55	
50	55.7 (1 + 1)	
60	48	
65	41.5 E	
80	59	
100	75	
mol%	η	
	75°	85°
0	800	500
20	1200	1000
40	2900	2100
50	4000	3000
55	4100	3300
60	4000	3200
80	3400	2400
100	3000	2100
mol%	κ	
	75°	85°
0	0	0
10	0.009	0.009
20	0.015	0.017
40	0.007	0.009
50	0.0045	0.006
60	0.008	0.0105
70	0.0105	0.0125
80	0.005	0.007
100	0.002	0.003

Benzoic anhydride ($C_{14}H_{10}O_3$) + 8-Oxyquinoline
(C_9H_7ON)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	
0	42	
9	32 E	
20	66	
40	96	
50	103 (1 + 1)	
60	92	
75	49.5 E	
80	60	
100	75	
mol%	η	
	95°	105°
0	2497	2097
20	4000	3050
40	8000	5900
50	13080	8510
60	8300	5900
80	3800	2800
100	750	100
mol%	κ	
	95°	105°
0	0.0002	0.0002
10	0.0060	0.0063
21	0.0062	0.0069
40	0.0017	0.0020
50	0.0003	0.0005
60	0.0008	0.0010
80	0.0019	0.0021
100	0.0004	0.0004

Phthalic anhydride ($C_8H_4O_3$) + sec. Butyl alcohol
($C_4H_{10}O$)

Lombaers, 1924

mol%	f. t.	mol%	f. t.
98.98	0	67.46	106.0
98.86	19.6	57.26	108.4
97.55	62.0	46.61	112.0
94.87	75.0	41.15	115.2
87.38	89.5	20.0	119.0
81.72	97.2	0.0	130.8
(before reaction)			

mol%	f. t.	mol%	f. t.
81.15	22	53.28	53.8
80.93	29	50	54.1
78.94	42	43.18	78.5
70.29	48.0	38.64	89.0
68.82	40.4	17.74	118.0
67.96	49.2	0	130.8
61.07	52.0		
E : 53.6 (after reaction)			

Phthalic anhydride ($C_8H_4O_3$) + 8-Oxyquinoline (C_9H_7ON) Dionisiev and Dzhelomanova, 1954 (fig.)			
mol%	f. t.	mol%	f. t.
0	128	70	101
20	120	80	99
40	105	90	88
45	99 E	95	71 E
60	100	100	75

mol%	η		
	135°	145°	
0	1300	1100	
20	1050	950	
40	1000	900	
60	1000	900	
80	1000	900	
100	1000	900	

mol%	κ (after prolonged heating)		
	115°	115°	135°
0	-	-	0.020
10	-	-	0.118
20	-	-	0.198
40	0.102	0.148	0.146
50	0.082	0.100	0.100
60	0.066	0.106	0.090
70	0.040	0.090	0.072
80	0.022	0.052	0.035
100	0.0	0.0	0.003

Methylformate ($C_2H_4O_2$) + Ethyl mercaptan (C_2H_6S) Lecat, 1949						
%		b. t.				
0		31.7				
-		28.5 Az				
100		35.8				

Ethylformate ($C_3H_6O_2$) + Methylalcohol (CH_4O) Lecat, 1949						
%		b. t.	Dt mix			
0		54.15	Az -3.2			
16		50.95				
20		-				
100		64.65				

Williams and Gordy, 1937						
Infrared absorption						

Ethyl formate ($C_3H_6O_2$) + Methyl malate I ($C_6H_{10}O_5$) Grossmann and Landau, 1910						
g/100cc		(α)				
		red	yellow	green	pale blue	dark blue violet
20°						
50.002	-5.24	-6.34	-7.12	-8.16	-8.60	-8.90
25.001	-5.12	-6.24	-6.80	-7.96	-8.36	-
12.5005	-5.04	-6.16	-6.72	-7.52	-8.00	-
4.936	-5.27	-6.89	-8.10	-7.90	-7.50	-6.89
2.468	-5.67	-7.70	-8.51	-7.10	-7.70	-

Propylformate ($C_4H_8O_2$) (b.t. = 80.85) + Alcohols
Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	50.2	61.85	-1.7 (83%)
Ethyl alcohol	C_2H_6O	78.3	39	71.75	-5.0 (50%)
Propyl alcohol	C_3H_8O	97.2	3	80.75	-1.8 (10%)
Isopropyl alcohol	C_3H_8O	82.4	36	75.9	-6.5 (36%)
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	40	77.5	-
Allyl alcohol	C_3H_6O	96.85	5	80.75	-1.3

Isopropylformate ($C_4H_8O_2$) + Methyl alcohol
(CH_4O)

Lecat, 1949

%	b. t.	Dt mix
0	68.8	Az -6.2
33	57.2	
50	-	
100	64.65	

Butylformate ($C_5H_{10}O_2$) (b.t. = 106.8) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	64	95.5	-2.8 (65%)
Butyl alcohol	$C_4H_{10}O$	117.8	15	106.0	-3.4 (47%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	52	105.4	-4.8 (50%)
Sec. Butyl alcohol	$C_4H_{10}O$	99.5	68	98.0	-
Tert. Amyl alcohol	$C_5H_{12}O$	102.35	65	101.0	-
Pentanol-3	$C_5H_{12}O$	116.0	1.5	106.5	-

Isobutylformate ($C_5H_{10}O_2$) (b.t. = 98.2) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH_4O	64.65	93	64.55	-0.8 (95%)
Ethyl alcohol	C_2H_6O	78.3	72	76.7	-3.3 (72%)
Propyl alcohol	C_3H_8O	97.2	43	92.5	-3.4 (50%)
Isopropyl alcohol	C_3H_8O	82.42	90	82.35	-2.5 (90%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	13	97.6	-2.2 (20%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	40	99.4	-
tert. Butyl alcohol	$C_4H_{10}O$	82.42	90	82.25	-2.5 (90%)
Allyl alcohol	C_3H_6O	96.85	40	91.7	-3.2 (40%)

Isoamylformate ($C_6H_{12}O_2$) (b.t. = 123.8) +
Lecat, 1949 Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	67	116.0	-3.0 (70%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	18	123.7	-3.8 (50%)
Methoxy-glycol	$C_3H_8O_2$	124.5	40	119.1	-1.2 (36%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	21	123.15	-
1-Chlor-2-propanol	C_3H_7OCl	127.0	30	123.0	-
2-Chlor-1-propanol	C_3H_7OCl	133.7	5	123.7	-

Allylformate ($C_4H_6O_2$) + Ethyl alcohol (C_2H_6O)

Lecat, 1949

%	b. t.
0	80.0
-	71.5
100	78.3
Az	

Methyl acetate ($C_3H_6O_2$) + Methyl alcohol (CH_3O)

Bredig and Bayer, 1927

p			p		
%			%		
L	V		L	V	
39.76°			49.76°		
401.3	0.0	0.0	589.4	0.0	0.0
422.3	2.1	4.3	619.4	2.6	4.5
431.9	4.8	8.7	640.0	6.8	9.9
437.4	6.9	10.2	653.9	9.0	11.5
443.8	9.4	13.1	657.4	10.1	13.4
445.7	12.5	14.3	660.6	13.7	15.5
447.3	17.2	17.9	663.8	17.6	18.6
446.4	19.7	18.3	661.4	21.8	19.7
445.0	22.5	20.3	658.4	25.8	22.0
439.2	29.0	23.6	652.4	31.0	24.5
434.6	32.8	25.5	635.0	40.0	28.9
422.8	40.8	26.2	610.0	51.3	32.6
402.9	53.5	32.2	592.5	57.1	36.2
384.7	61.8	37.3	558.5	68.2	41.8
351.0	76.2	48.4	558.5	68.2	41.8
331.5	85.4	59.8	535.0	72.3	43.9
301.4	91.8	71.6	404.6	100.0	100.0
286.0	93.4	78.6			
259.8	100.0	100.0			

Lecat, 1949

%	b. t.	Dt mix
0	56.95	
18.7	53.8	Az
100	64.65	-3.5

Ryland, 1899

%	b. t.
0	55.5 - 56.5
18	53.5 - 54.5
100	64.5 - 65

Methyl acetate ($C_3H_6O_2$) + Ethyl alcohol (C_2H_6O)

Bredig and Bayer, 1927

p		%
L		V
39.76°		
187.3	0.0	0.0
246.0	5.1	16.0
270.3	9.9	22.2
282.5	14.1	26.8
290.0	18.4	29.4
294.0	22.9	33.9
299.0	29.6	38.5
300.0	34.0	39.2
299.0	39.4	41.3
300.0	42.8	43.0
300.0	48.4	47.0
301.0	54.4	49.5
295.6	65.2	58.2
293.2	69.1	60.6
287.5	78.8	67.8
279.0	87.7	77.8

Mathews and Cooke, 1914

t	d	η
50%		
0	0.8819	899.1
25	0.8637	612.6
40	0.8394	494.8
55	0.8237	414.3

Peel, Madgin and Briscoe, 1928

50 vol% Dv = +0.25% Dt = -7.05°

Madgin, Peel and Briscoe, 1928

50 vol% 5° Dt = -4.6°

30° Dt = -5.3°

Methyl acetate ($C_3H_6O_2$) + Glycol ($C_2H_6O_2$)

Mukhin and Mukhina, 1930

%	sat. t.	%	sat. t.
5.0	3.0	40.0	26.0
10.0	16.9	45.0	25.5
15.0	22.5	50.0	24.3
20.0	25.3	55.0	22.5
25.0	26.5	60.0	19.8
30.0	26.8	65.0	16.3
35.0	26.5	70.0	11.0

C.S.T. = 26.8°

Ethyl acetate ($C_4H_8O_2$) + Methyl alcohol (CH_3O)

Ryland, 1899

%	b. t.
0	75.5 - 76.5
47	61.7 - 62.5 Az
100	64.5 - 65

Herz and Levi, 1929

Az : 44 % 62.25°

t	0 %	d	100 %
		44 %	
20	0.9005	0.8515	0.7915
30	0.8884	0.8409	0.7825
40	0.8762	0.8299	0.7740
50	0.8635	0.8189	0.7650

t	0 %	η	100 %
		44 %	
20	453.8	487.5	586.6
30	403.5	441.3	512.0
40	361.4	386.3	452.1
50	337.1	344.7	400.7

t	0 %	σ	100 %
		44 %	
20	24.09	22.86	22.70
30	22.92	22.10	21.86
40	21.68	21.09	20.94
50	20.30	20.08	19.97

Williams and Gordy, 1937

Infrared absorption .

Timofeev, 1905

initial	%	final	Q dil
			(by mole acetate)
100		94.83	-733
94.83		89.3	-709
89.3		84.4	-685
84.4		80.7	-678
80.7		77.0	-644
			(by mole alcohol)
13.3		16.4	-383
9.1		13.3	-488
4.8		9.1	-689
0		4.8	-1048

Ethyl acetate ($C_4H_8O_2$) + Ethyl alcohol (C_2H_5O)

Griswold, Chu and Winsauer, 1949

mol%	b. t.	P ₁	P ₂
L	V		
15.5	22.8	73.9	676
27.2	33.2	72.7	650
30.9	36.0	72.4	645
52.7	50.1	71.9	634
55.8	51.7	72.0	635
62.8	56.2	72.3	644
73.6	62.8	73.3	655
83.6	73.3	74.6	694
92.1	84.5	76.1	730

Kirschbaum, 1950 (fig.)

mol%	at b. t.	mol%
L	V	L
		V
10	19	60
20	31	70
40	47.5	80
50	52.5	90
56	56	

Stockhardt, 1950

mol%		mol%	
L	V	L	V
p = 760mm			
0.0	0.0	50.0	48.4
5.0	8.6	60.0	54.3
10.0	16.3	70.0	61.1
20.0	37.4	80.0	69.3
30.0	32.6	90.0	81.3
40.0	42.4	95.0	89.8
46.0	46.0	100.0	100.0

Merriman, 1913

Azeotropic mixture

p	%	b. t.	b. t.
			0%
25.0	12.85	-1.37	+0.61
77.4	15.95	+18.71	21.01
117.2	17.60	27.02	29.60
219.9	21.21	40.50	43.73
423.0	25.79	56.31	60.46
578.2	28.41	64.43	69.16
760.0	390.93	71.81	77.15
948.0	33.27	78.13	84.01
1121.0	35.22	83.05	89.42
1475.5	38.87	91.35	98.60

Mund and Heim, 1932

t	p	t	p	t	p
0%		13.65%		19.48%	
20.00	73.0	20.41	83.9	20.12	80.8
25.00	94.6	25.37	107.6	24.83	103.6
30.00	120.1	30.23	136.4	29.80	132.0
35.00	151.5	35.30	172.7	34.98	169.7
40.00	188.1	40.30	215.8	39.89	212.3
45.00	233.0	45.12	265.5	45.10	266.3
50.00	285.8	50.54	332.2	49.95	327.9
55.00	347.2	54.76	391.7	55.43	409.1
60.00	419.6	59.62	473.6	60.13	494.3
65.00	502.6	65.30	582.3	65.24	596.2
70.00	598.0	69.70	682.5	70.54	720.2
75.00	708.0	75.77	842.4	74.55	829.8
77.29	763.5	80.45	985.0	81.18	1039.6
80.00	832.5	85.20	1147.7	85.45	1192.5
85.00	977.7	90.50	1356.3	90.45	1392.7
90.00	1141.7	93.65	1491.6	93.20	1514.1
95.00	1322.9				
100.00	1528.0				

t	p	t	p	t	p
29.60%		40.33%		49.43%	
20.19	81.3	20.36	80.2	20.05	75.6
25.01	105.0	25.60	105.0	25.00	97.2
29.95	134.0	29.79	129.0	29.95	124.5
35.08	171.1	34.91	164.5	35.00	158.8
40.75	221.6	41.05	218.1	40.15	201.9
45.13	267.9	45.51	265.2	45.04	251.2
49.62	324.5	49.81	321.7	50.13	313.6
55.32	409.4	55.60	406.7	55.28	391.4
59.75	485.1	59.76	479.5	60.05	472.8
64.70	586.0	65.00	585.6	65.10	577.7
70.30	717.1	70.15	711.4	70.20	699.6
74.90	845.3	75.23	852.1	75.30	842.6
79.86	1003.1	80.38	1020.9	80.41	1013.6
85.30	1202.8	84.87	1190.6	85.25	1194.7
89.82	1391.8	91.86	1493.0	90.49	1421.7
92.13	1499.1			92.40	1514.0

t	p	t	p	t	p
71.01%		89.48%		100%	
19.90	66.4	20.33	57.9	20.00	45.1
25.34	88.2	25.03	74.3	25.00	60.4
29.50	109.3	30.30	97.6	30.00	79.1
35.06	143.5	34.95	123.6	35.00	104.8
39.95	181.0	39.58	155.3	40.00	136.0
44.95	227.8	45.00	203.3	45.00	174.8
50.00	285.6	49.80	253.8	50.00	221.4
55.08	355.6	55.01	318.3	55.00	279.9
60.26	442.4	59.90	392.9	60.00	352.4
65.29	542.2	64.80	482.9	65.00	437.8
70.04	651.3	69.95	593.0	70.00	541.1
75.16	788.8	75.21	729.1	75.00	665.6
80.29	951.0	80.23	880.8	78.31	758.7
85.64	1148.4	85.30	1057.8	78.48	764.2
90.00	1335.6	89.85	1241.0	80.00	811.6
93.48	1501.7	95.25	1497.6	85.00	980.9
				90.00	1180.8
				95.00	1413.9

Deveux, Schouteden and al., 1938

Azeotrope

%	p	b.t.	%	p	b.t.
61.5	1400	90	76	335	50
64	1185	85	77	275	45
66.5	1005	80	78	220	40
68	850	75	80	175	35
69.8	715	70	82	140	30
70.5	590	65	83	115	25
71.5	490	50	84	85	20
74	410	55			

Ryland, 1899

%	b.t.
0	75.5 - 76.5
31	71 - 72 Az
100	77.5 - 78

Wade, 1905

%	b.t.
30.6	71.8
100	78.3

Lecat, 1949

%	b.t.	Dt mix
0	77.1	-
30.8	71.8 Az	-
50	-	-5.4
100	78.3	-

Sappir, 1929

%	f.t.	E
0	-83.6	-
11.4	-87	-118.5
28.4	-90	"
46.8	-92	"
58.5	-96.5	"
71.5	-110	"
87.6	-115.5	"
100	-114.1	-

Wade, 1905

%	d
100	15°
30.6	0.7935
	0.8674

Hirobe, 1908					
mol %		d	mol %		d
25.10°					
0	0.89447	58.123	0.84404		
19.319	.88009	70.773	.82910		
38.86	.86333	77.763	.81995		
53.458	.84887	90.508	.80173		
54.449	.84796	100	.78600		
Merriman, 1913					
%		d	%		d
0°					
0	0.92454	24.481	0.89104	60.511	0.84830
5.103	.91734	30.308	.88416	71.015	.83659
10.184	.91031	34.588	.87886	85.750	.82077
15.662	.90297	41.100	.87094	94.654	.81164
16.185	.90225	50.059	.86033	100	.80628
19.920	.89739				
Mathews and Cooke, 1914					
t		d	t		d
50 %					
0	0.8645	40	0.8267		
25	0.8440	55	0.8085		
Peel, Madgin and Briscoe, 1928					
50 vol % Dv = +0.10 %					
Griswold, Chu and Winsaner, 1949					
%		d	%		d
25°					
0	0.89428	49.6	0.83449		
6.4	.88459	62.2	.82128		
12.5	.87682	74.8	.80858		
24.6	.86238	87.1	.79691		
37.3	.84783	100.0	.78459		
Hirata, 1908					
vol %		η	vol %		η
25°					
75	778	96.871	1045		
87.5	915	98.43	1070		
93.75	993	99.22	1983		
Mathews and Cooke, 1914					
t		η	t		η
50 %					
0	959.0	40	539.6		
25	694.4	55	442.5		

Timofeev, 1905					
%		U			
20°					
0	0.478				
52.5	0.532				
100	0.5933				
%		Q	%		Q
initial	final	dil	initial	final	dil
(by mole acetate)					
100	95.1	-1109	52.5	53.85	- 112
95.1	91.2	-1035	10.0	14.2	- 820
91.2	85.7	- 964	5.2	10.0	-1075
85.7	81.9	- 914	0	5.2	-1510
54	52.5	- 571			
Longtin, 1942 (fig.)					
mol %		Q mix	mol %		Q mix
23 %					
100	0	60	-276	20	-240
90	- 96	50	-292	10	-144
80	-192	40	-295	0	0
70	-240	30	-288		
Hirobe, 1908					
mol %		Q mix	mol %		Q mix
25.10°					
0	-	54.449	-278.5	77.763	-202.1
19.319	-223.2	58.123	-290.6	90.508	-100.6
38.86	-	70.773	-249.7	100	-
53.458	-315.5				
Peel, Madgin and Briscoe, 1928					
50 vol % Dt = -5.3°					
Ethyl acetate (C ₄ H ₈ O ₂) + Propyl alcohol (C ₃ H ₈ O)					
Timofeev, 1905					
%		U			
20°					
0	0.478				
56.6	0.554				
100	0.579				
%		Q dil	(by mole acetate)		
initial	final				
100	93.1	-1249			
93.1	86.0	-1117			
86.0	80.8	-1000			
59.4	56.6	- 606			

Hirobe, 1908						Hirobe, 1908		
mol %	d	mol %	d	mol %	d	mol%	d	Q mix
25.10°						25.13°		
0.000	0.89447	47.789	0.85307	78.799	0.82302	0.000	0.89447	-
13.816	.88321	48.746	.85228	91.005	.80976	14.360	.87968	-229.0
27.835	.87110	62.482	.83933	100.000	.79983	28.540	.86554	-375.7
44.059	.85655					41.540	.85247	-423.4
mol %	Q mix	mol %	Q mix	mol %	Q mix	45.565	.84900	-432.6
25.10°						63.216	.83193	-403.3
13.816	-203.5	47.899	-364.0	78.799	-236.6	73.319	.82542	-362.7
27.835	-314.9	48.746	-361.1	91.005	-121.7	90.206	.80686	-156.4
44.059	-363.5	62.482	-336.0			100.000	.79806	-
Ethyl acetate ($C_4H_8O_2$) + Isopropyl alcohol (C_3H_8O)						Timofeev, 1905		
Ryland, 1899						initial % final Q dil (by mole acetate)		
% b. t.						100	94	-1523
0 75.5 - 76.5						94.0	87.1	-1350
26 74 - 75 Az						87.1	82.2	-1186
100 81 - 82						54.3	52.0	-491
Ethyl acetate ($C_4H_8O_2$) + Isobutyl alcohol ($C_4H_{10}O$)						Ethyl acetate ($C_4H_8O_2$) + Tert. butyl alcohol ($C_4H_{10}O$)		
Jonsson, 1887 - 1888						Lecat, 1949		
vol V/ vol L	p	vol V/ vol L	p			% b. t. Dt mix		
11.4%		25%				0	77.1	
20.5°		18.0°				25	75.3 Az	-7.2
3.84	164.02	0.32	196.22			100	82.32	
18.88	101.92	3.16	115.45			Ethyl acetate ($C_4H_8O_2$) + Amyl alcohol ($C_5H_{12}O$)		
41.08	87.36	18.24	69.24			Whatmough, 1902		
69.48	81.36	52.68	60.64			mol% σ		
100.16	78.60	77.12	59.57			18°		
18.10°		19.50°				0	23.77	
6.76	127.88	0.84	99.76			20	23.74	
18.80	90.32	20.12	73.00			40	23.72	
46.90	75.68	42.32	65.52			50	23.71	
71.10	72.16	63.12	63.12			60	23.68	
96.48	70.40	80.24	61.84			80	23.70	
						100	23.84	

Ethyl acetate ($C_4H_8O_2$) + Isoamyl alcohol
($C_5H_{12}O$)

Hirobe, 1908.

mol%	d	Q mix
	25.08°	
0	0.89447	-
10.690	.88316	-185.5
23.340	.87063	-323.8
37.397	.85754	-402.4
40.883	.85394	-410.6
42.988	.85232	-415.16
58.080	.83923	-417.8
76.418	.82452	-323.2
81.760	.82046	-251.5
100	.80730	-

Kovalenko and Trifonov, 1953

mol%	σ		
	0°	25.4°	31°
0	26.57	23.54	22.89
25	26.14	23.32	22.67
50	25.70	23.25	22.82
75	25.63	23.32	22.82
100	25.56	23.54	23.10

Ethyl acetate ($C_4H_8O_2$) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
12.8	-20.0
76.2	0.0
100	6.88

Ethyl acetate ($C_4H_8O_2$) + Lauryl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
2.5	-20.0
13.9	0.0
43.1	10.0
90.7	20.0
100	23.95

Ethyl acetate ($C_4H_8O_2$) + Tetradecyl alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.1	-20.0
3.3	0.0
9.2	10.0
29.3	20.0
73.1	30.0
100	38.26

Ethyl acetate ($C_4H_8O_2$) + Cetyl alcohol ($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.8	0.0
3.0	10.0
8.4	20.0
25.4	30.0
68.7	40.0
100	49.62

Ethyl acetate ($C_4H_8O_2$) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.1	0.0
0.6	10.0
2.7	20.0
9.3	30.0
33.1	40.0
100	57.98

Ethyl acetate ($C_4H_8O_2$) + Glycol ($C_2H_6O_2$)

Mukhin and Mukhina, 1930

%	sat. t.	%	sat. t.
5.68	6.5	45.0	56.8
10.0	33.0	50.0	56.5
15.0	44.5	55.0	56.0
20.0	50.5	60.0	54.4
25.0	54.4	65.0	51.5
30.0	56.3	70.0	46.5
35.0	57.0	85.0	39.2
40.0	57.0		

C.S.T. = 57.0°

Ethyl acetate ($C_4H_8O_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Walden, 1906

%	D b. t.
1.53	+0.212
3.13	0.478
4.76	0.759
6.83	1.130
8.77	1.495
11.11	1.928
14.03	2.475

%	d	(α) _D
20°		
6.54	0.918	-7.95
18.05	0.949	-8.11
70°		
5.66	0.855	-7.87
13.98	0.885	-8.13

Walden, 1906

g/100cc	(α)	d. c.	(α)	d. c.	(α)	d. c.
	red		green		violet	
18°						
20.42	-6.51	1	-9.65	1.48	-12.12	1.87
10.21	-6.51	1	-9.65	1.40	-12.10	1.86
2.55	-64.7	1	-9.41	1.45	-12.2	1.88

d. c. = dispersion constant

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
50.364	-5.96	-7.15	-8.44	-9.83	-10.32	-11.02
25.182	-6.12	-7.31	-8.66	-10.21	-11.00	-
12.591	-6.59	-7.94	-9.29	-10.80	-11.52	-
4.922	-6.70	-8.13	-9.55	-10.97	-11.78	-12.60
2.461	-6.91	-8.13	-9.75	-10.97	-11.78	-

Ethyl acetate ($C_4H_8O_2$) + Ethyl malate ($C_8H_{14}O_5$)

Walden, 1906

%	D b. t.
2.94	+0.364
4.82	0.724
7.15	0.995
9.30	1.338
11.20	1.650

%	d	(α) _D
20°		
6.57	0.912	-12.63
11.20	0.923	-12.56
14.62	0.934	-12.57
70°		
6.57	0.851	-12.20
14.62	0.872	-11.98

g/100cc	(α)	d. c.	(α)	d. c.	(α)	d. c.
	red		green		violet	
18°						
29.90	-9.49	1	-14.80	1.57	-20.18	2.12
14.95	-9.8	1	-15.1	1.54	-20.6	2.09
7.47	-9.8	1	-15.4	1.55	-20.8	2.11

Ethyl acetate ($C_4H_8O_2$) + Ethyl tartrate ($C_8H_{14}O_6$)

Walden, 1906

%	d	(α) _D
0°		
2.63	0.931	7.34
6.40	0.940	7.62
14.52	0.967	7.68
20°		
2.63	0.906	10.61
6.40	0.917	10.21
10.31	0.927	10.04
14.52	0.943	9.81
50°		
2.63	0.867	12.76
6.40	0.881	12.60
14.52	0.908	12.28
70°		
6.52	0.856	14.60
14.52	0.882	13.23

Ethyl acetate ($C_4H_8O_2$) + Cyclohexanol ($C_6H_{12}O$)

Weissenberger and Schuster, 1924

mol%	p	mol%	ρ
20°			
80.0	27	40.00	54
66.7	38	33.33	57
57.1	44.8	25.00	60
50.0	49	20.00	73
mol%	η	σ	
(water = 1)			
20°			
100	14.5	0.474	
50.0	3.7	0.412	
66.7	2.0	0.390	
57.2	1.4	0.378	
50.0	1.2	0.369	
40.0	0.25	0.357	
33.3	0.80	0.352	
25.0	0.76	0.348	
20.0	0.72	0.347	
0	0.48	0.321	

Ethyl acetate ($C_4H_8O_2$) + o-Methylcyclohexanol
($C_7H_{14}O$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p		
15°			
66.7	25.6		
50.0	32.1		
40.0	36.2		
33.3	38.9		
28.6	41.4		
25.0	43.2		
22.2	44.2		
0.0	56.4		
mol%	η	σ	
(water = 1)			
15°			
66.7	3.21	0.403	
50.0	1.54	0.386	
40.0	1.15	0.375	
33.3	0.94	0.369	
28.6	0.81	0.369	
25.0	0.71	0.374	
22.2	0.70	0.370	

Ethyl acetate ($C_4H_8O_2$) + m-Methylcyclohexanol
($C_7H_{14}O$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p		
15°			
66.7	29.1		
50.0	36.0		
40.0	29.9		
33.3	42.1		
28.6	43.8		
25.0	44.5		
22.2	44.9		
mol%	η	σ	
(water = 1)			
15°			
66.7	4.11	0.423	
50.0	1.69	0.399	
40.0	1.05	0.391	
33.3	0.98	0.386	
28.6	0.97	0.385	
25.0	0.78	0.385	
22.2	0.72	0.385	

Ethyl acetate ($C_4H_8O_2$) + p-Methylcyclohexanol
($C_7H_{14}O$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p		
15°			
66.7	27.1		
50.0	33.8		
40.0	37.8		
33.3	40.2		
28.6	42.2		
25.0	44.0		
22.2	45.1		
mol%	η	σ	
(water = 1)			
15°			
66.7	4.25	0.435	
50.0	1.69	0.401	
40.0	1.05	0.384	
33.3	0.98	0.376	
28.6	0.97	0.373	
25.0	0.78	0.372	
22.2	0.72	0.372	

Ethyl acetate ($C_4H_8O_2$) + Borneol ($C_{10}H_{18}O$)

Peacock, 1914

%	d	n_D	α_D
25°			
0.8699	0.8953	1.3711	28.2
2.3461	0.8956	1.3719	28.4
4.433	0.8976	1.3761	28.2
8.951	0.9004	1.3790	28.1
17.663	0.9063	1.3891	28.6
26.301	0.9127	1.3983	28.5

Propyl acetate ($C_5H_{10}O_2$) (b. t. = 101.6) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Ethyl alcohol	C_2H_6O	78.3	83	78.2	-1.5 (90%)
Propyl alcohol	C_3H_8O	97.2	50	94.7	-5.7 (50%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	19	101.0	-5.1 (20%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	53	97.3	-7.0 (50%)
tert. Amyl alcohol	$C_5H_{12}O$	102.35	42	99.8	-5.2 (50%)
Allyl alcohol	C_3H_6O	96.85	52	94.6	-5.3 (50%)

Propyl acetate ($C_5H_{10}O_2$) + Ethyl lactate ($C_5H_{10}O_3$)

Morgan and Griggs, 1917

%	σ	
	15°	40°
0	24.080	21.347
28.68	25.19	22.48
51.59	26.19	23.54
78.83	27.78	25.21
100	29.449	26.990

Isopropyl acetate ($C_5H_{10}O_2$) + Ethyl alcohol
(C_2H_6O)

Lecat, 1949

%	b. t.	Dt mix
0	89.5	
53	76.5	Az
70	-	
100	78.3	-4.4

Isopropyl acetate ($C_5H_{10}O_2$) + Isopropyl alcohol
(C_3H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	89.5	
30	-	
57	81.0	Az
100	82.42	-7.3

Butyl acetate ($C_6H_{12}O_2$) + Methyl alcohol (CH_4O)

Sieg, Crützen and Jost, 1951

mol%		P ₂	P ₁	P
L	V			
23.50°				
0	0	0.0	11.4	11.4
5.0	60.0	16.9	11.0	27.4
10.6	75.1	34.2	10.4	44.2
20.0	83.3	49.2	9.9	58.6
40.3	89.8	73.7	8.4	81.5
54.0	91.0	78.7	7.9	88.6
74.5	94.3	92.6	5.8	99.4
83.1	95.7	98.4	4.6	104.7
94.8	98.6	109.8	1.7	113.5
100	100	116.0	0.0	116.0

mol%		r	mol%		p
L	V		L	V	
40.0°					
0.0	0.0	26.4	58.8	91.6	203.0
10.6	75.2	91.0	61.4	92.0	205.5
13.8	78.1°	106.0	70.0	93.4	217.3
20.0	82.7	129.8	74.9	94.4	223.4
29.6	86.5	156.8	81.8	95.4	232.4
37.8	88.1	170.8	85.9	95.7	237.0
47.2	89.7	185.7	100	100	262.8
54.3	90.9	194.7			

mol%		p	mol%		p
L	V		L	V	
60,0°					
0.0	0.0	69.9	60.6	91.2	485.3
7.6	65.0	185.8	71.8	93.5	525.2
14.5	75.2	260.0	79.3	94.1	549.9
25.1	82.7	336.5	90.0	96.6	588.4
30.6	85.2	370.7	100	100	632.4
47.8	89.3	442.2			

mol%		mol%	
L	V	L	V
20°			
0.0	0.0	61.4	91.4
7.0	44.0	64.2	92.3
12.1	62.3	75.9	94.3
20.0	75.0	80.0	95.3
24.0	78.8	90.8	97.1
39.2	85.5	100.0	100.0
53.0	89.5		

mol%		b. t.	mol%		b. t.
744mm:					
0.0	126.2	60.0	71.6		
10.4	110.4	71.5	68.9		
22.0	94.1	85.5	66.1		
30.0	85.2	92.5	64.92		
43.0	76.8	100.0	64.15		

mol%		Q mix	mol%		Q mix
20°					
10.1	-120.0	54.2	-267.2		
18.9	-195.0	63.0	-239.0		
33.3	-266.0	81.3	-143.8		
44.8	-280.0	86.7	-105.1		

Lecat, 1949

Butylacetate ($C_6H_{12}O_2$) (b. t. = 126.0) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	68.5	117.2	-4.0 (68%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	17.5	125.85	-3.3 (22%)
Methoxy-glycol	$C_3H_8O_2$	124.5	48	119.5	-1.2 (76%)
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	10	125.35	-1.8 (16%)
Ethylene chlorhydrine	C_2H_5OCl	128.6	31	125.6	-1.2 (50%)
1-Chlor-2-propanol	C_3H_7OCl	127.0	25	125.5	-

Butyl acetate ($C_6H_{12}O_2$) + Butyl alcohol ($C_4H_{10}O$)

Brunjes and Furnas, 1935

L	mol %	V	b. t.	L	mol %	V	b. t.
10.90	21.7	121.75	67.9	69.2	116.2		
20.8	33.2	120.1	71.0	71.5	116.2		
29.5	41.3	119.1	72.6	73.4	116.6		
36.1	46.5	118.4	72.9	72.9	116.2		
43.3	51.7	117.8	73.1	73.3	116.55		
44.7	52.9	117.5	75.6	75.0	116.55		
51.0	56.9	117.3	82.8	81.3	116.3		
54.4	60.1	117.1	86.5	85.0	116.8		
55.0	60.7	116.8	91.3	89.5	117.0		
57.5	61.9	116.6	96.0	94.2	117.0		
60.8	64.2	116.4	98.0	96.4	117.0		
64.6	66.9	116.3	99.5	98.9	117.0		

mol %	d	mol %	d	mol %	d
25°					
0.00	0.87418	36.50	0.85362	77.15	0.81523
2.20	.87293	43.20	.84998	80.10	.82276
3.20	.87210	45.70	.84778	80.30	.82296
3.25	.87190	47.70	.84619	86.10	.81817
5.04	.87124	53.70	.84240	89.10	.81552
5.49	.87076	57.70	.83967	91.60	.81340
10.50	.86825	60.75	.83756	91.75	.81313
10.74	.86839	64.10	.83514	94.25	.81087
15.40	.86605	65.60	.83413	94.35	.81042
20.80	.86302	67.30	.83271	97.25	.80838
24.80	.86078	70.85	.83017	100.00	.80598
29.30	.85805	74.10	.82763		

Sheinker and Peresleni, 1952

mol%		
L	V	b. t.
p = 50mm		
100	100	56.1
83.3	92.1	54.7
75.2	86.8	53.5
64.5	76.5	52.3
50.4	59.1	51.2
43.7	48.7	50.9
41.6	43.5	50.8
37.0	37.0	50.7
36.3	35.5	50.8
32.2	28.2	51.1
22.5	18.0	51.5
0	0	52.6
p = 165.6mm		
100	100	80.3
80.7	87.3	78.3
70.5	77.7	77.2
62.0	67.5	76.8
57.8	61.3	76.5
47.9	47.4	76.4
37.5	31.3	76.9
21.0	16.1	78.2
0	0	80.5
p = 760mm		
100	100	117.5
88.8	89.6	117.1
84.4	84.7	117.0
82.4	82.5	116.9
78.6	77.9	116.8
74.1	72.2	116.9
69.2	66.4	117.1
58.0	51.4	117.9
48.2	37.2	118.9
33.4	21.9	121.2
0	0	126.1

Butyl acetate ($C_6H_{12}O_2$) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
15.1	-20.0
76.1	0.0
100	6.88

Butyl acetate ($C_6H_{12}O_2$) + Lauryl alcohol
($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
5.2	-20.0
17.8	0.0
45.7	10.0
90.7	20.0
100	23.95

Butyl acetate ($C_6H_{12}O_2$) + Tetradecyl alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
1.1	-20.0
5.8	0.0
14.5	10.0
36.7	20.0
73.3	30.0
100	38.26

Butyl acetate ($C_6H_{12}O_2$) + Cetyl alcohol
($C_{16}H_{34}O$)

Hoerr, Harwood and Harwood, 1944

%	f. t.
0.3	-20.0
2.0	0.0
4.9	10.0
12.1	20.0
31.5	30.0
69.2	40.0
100	49.62

Butyl acetate ($C_6H_{12}O_2$) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.3	0.0
1.7	10.0
5.0	20.0
14.5	30.0
37.1	40.0
100	57.98

Isobutyl acetate ($C_6H_{12}O_2$) (b.t. = 117.4) +
Alcohols
Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	45	114.2	-4.5 (50%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	78	107.75	-4.8 (50%)
Methoxyglycol	$C_3H_8O_2$	124.5	16	115.6	-1.0

Sec. Butyl acetate ($C_6H_{12}O_2$) + Sec. Butyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b.t.	
0	122.2	
86.3	99.6	Az (sic.)
100	99.5	

Amyl acetate ($C_7H_{14}O_2$) + Amyl alcohol ($C_5H_{12}O$)

Holley, 1902

%	b.t.	%	b.t.
770.0mm - 770.4mm			
100.00	129.3	64.16	130.1
97.36	129.1	60.08	130.2
94.58	129.3	56.87	130.5
91.84	129.55	50.04	131.3
89.10	129.9	42.88	132.0
85.42	129.95	35.21	133.0
82.06	130.0	27.83	133.8
78.48	130.0	20.85	134.55
74.80	130.05	17.80	135.5
71.27	130.01	7.49	136.2
67.62	130.01	0.00	137.5

Amyl acetate ($C_7H_{14}O_2$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.	
0	148.8	
6	147.6	Az
100	197.4	

Isoamyl acetate ($C_7H_{14}O_2$) (b.t. = 142.1) + Alc.
Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Cyclopentanol	$C_5H_{10}O$	140.85	48	139.4	-4.8 (40%)
Ethoxyglycol	$C_4H_{10}O_2$	135.3	70	133.8	-2.4 (50%)
Methyl lactate	$C_4H_8O_3$	143.8	44	138.5	-1.9 (50%)
Glycol	$C_2H_6O_2$	197.4	two liquid phases.		

Hexyl acetate ($C_8H_{16}O_2$) + Butoxyglycol ($C_6H_{14}O_2$)

Lecat, 1949

%	b.t.	
0	171.5	
45	167.7	Az
100	171.15	

Lecat, 1949

Methylpropionate ($C_4H_8O_2$) (b.t. = 79.85) +
Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	48	62.4	-5.7 (50%)
Ethyl alcohol	C_2H_6O	78.3	36	72.2	-5.5 (50%)
Isopropyl alcohol	C_3H_8O	82.42	35	76.35	-7.3 (35%)
Tert. Butyl alcohol	$C_4H_{10}O$	82.45	36	77.6	-

Ethylpropionate ($C_5H_{10}O_2$) (b.t. = 99.1) + Alcohols Lecat, 1949						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Ethyl alcohol	C_2H_6O	78.3	72	77.95	-3.8 (75%)	
Propyl alcohol	C_3H_8O	97.2	46	93.4	-5.6 (50%)	
Isobutyl alcohol	$C_4H_{10}O$	108.0	13	98.9	-1.5 (10%)	
sec. Butyl alcohol	$C_4H_{10}O$	99.5	45	95.8	-5.0 (40%)	
tert. Amyl alcohol	$C_5H_{12}O$	102.35	30	98.0	-4.5 (38%)	
Allyl alcohol	C_3H_6O	96.85	43	93.5	-6.0 (47%)	
Ethylpropionate ($C_5H_{10}O_2$) + Methyl malate 1 ($C_6H_{10}O_5$) Grossmann and Landau, 1910						
g/100cc		(α)				
	red yellow green pale dark violet					
				blue blue		
20°						
50.191	-5.18	-6.38	-7.07	-8.67	-9.16	-9.86
25.0955	-5.02	-6.02	-7.01	-8.09	-8.49	-9.01
12.5478	-5.66	-7.01	-7.57	-8.29	-8.77	-9.09
4.986	-5.82	-7.42	-8.02	-8.62	-9.03	-9.43
2.493	-6.42	-8.02	-8.82	-9.63	-10.03	-10.43
Propylpropionate ($C_6H_{12}O_2$) (b.t.=123.0) + Alc. Lecat, 1949.						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Butyl alcohol	$C_4H_{10}O$	117.8	-	117.5	-	
Methoxyglycol	$C_3H_8O_2$	124.5	38	118.5	-1.3 (40%)	
Ethylene chlorhydrine	C_2H_5OCl	128.6	-	122.7	-1.1 (50%)	
Butylpropionate ($C_7H_{14}O_2$) (b.t. = 146.8) + Alcohols Lecat, 1949						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Glycol	$C_2H_6O_2$	197.4	7	146.0	-	
Propoxyglycol	$C_5H_{12}O_2$	151.35	10	145.0	-	
Methyl lactate	$C_4H_8O_3$	143.8	60	140.5	-2.5 (55%)	
Ethylene bromhydrin	C_2H_5OBr	150.2	50	146.6	-	
Isobutylpropionate ($C_7H_{14}O_2$) (b.t. = 137.5) + Alcohols Lecat, 1949						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Isoamyl alcohol	$C_5H_{12}O$	131.9	72	131.3	-3.5 (70%)	
Ethoxyglycol	$C_4H_{10}O_2$	135.3	35	131.5	-	
Methyl lactate	$C_4H_8O_3$	143.8	40	135.8	-2.0 (40%)	
Cyclopentanol	$C_5H_{10}O$	140.85	28	136.5	-	
Isoamylpropionate ($C_8H_{16}O_2$) (b.t. = 160.7) + Alcohols Lecat, 1949						
2nd Comp.		Az				
Name	Formula	b.t.	%	b.t.	Dt mix	
Cyclohexanol	$C_6H_{12}O$	160.8	47	158.5	-4.0 (50%)	
Ethyl lactate	$C_5H_{10}O_3$	154.1	78	152.8	-	

Ethylbutyrate ($C_6H_{12}O_2$) (b.t. = 121.5) +
Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	58	115.9	-2.5 (72%)
Methyl propyl carbinol	$C_5H_{12}O$	119.8	47	118.5	-
Methoxy-glycol	$C_3H_8O_2$	124.5	32	117.8	-1.0 (30%)

Methylbutyrate ($C_5H_{10}O_2$) (b.t. = 102.65) +
Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Ethyl alcohol	C_2H_6O	78.3	84	78.0	-0.7 (95%)
Propyl alcohol	C_3H_8O	97.2	51	94.5	-4.4 (50%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	25	101.3	-3.5 (23%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	59	97.7	-5.5 (50%)
tert. Amyl alcohol	$C_5H_{12}O$	102.35	47	99.8	-4.8 (50%)
Allyl alcohol	C_3H_6O	96.85	51	94.7	-3.1 (50%)

Propylbutyrate ($C_7H_{14}O_2$) (b.t. = 143.7) +
Alcohols

Lecat, 1949

	2nd Comp.	Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Glycol	C ₂ H ₆ O ₂	197.4	3	143.6	-
Ethoxy-glycol	C ₄ H ₁₀ O ₂	135.3	72	134.0	-1.5 (80%)
Methyl lactate	C ₄ H ₈ O ₃	143.8	45	138.5	-3.2 (45%)

Butyl butyrate ($C_8H_{16}O_2$) + Butyl alcohol ($C_4H_{10}O$)

Othmer, 1943

L	mol% (b.t.)		V
	V	L	
0	0	50	83.8
2	11.7	60	87.6
5	27.5	70	90.7
10	53.4	80	93.8
20	67.9	90	97.1
30	74.7	100	100.0
40	79.7		

Butyl butyrate ($C_8H_{16}O_2$) (b.t. = 166.4) +
Alcohols

Lecat, 1949

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	16	160.3	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	20	165.0	-1.5 (25%)
Cyclohexanol	$C_6H_{12}O$	160.8	-	160.5	-
Furfuryl alcohol	$C_5H_6O_2$	169.35	30	164.0	-

Isoamyl butyrate ($C_9H_{18}O_2$) (b.t. = 181.05) +
Alcohols

Lecat, 1949.

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Isooctyl alcohol	$C_8H_{18}O$	180.4	72	180.3	-3.7 (60%)
Glycol	$C_2H_6O_2$	197.4	23	167.5	-
Pinacol	$C_6H_{14}O_2$	174.35	-	173.9	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	86	170.75	-0.5 (90%)
Methoxydi-glycol	$C_5H_{12}O_3$	192.95	22	176.55	-0.8 (20%)
Isobutyl lactate	$C_7H_{14}O_3$	182.15	28	178.5	-1.3 (20%)
Dichlorhydrin as. Glycol monoacetate	$C_3H_6OCl_2$	182.5	-	180.9	-
			50%	-	+1.0
	$C_4H_8O_3$	190.9	21	180.2	-

Isobutyl butyrate ($C_8H_{16}O_2$) (b.t. = 156.9) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Cyclohexanol	$C_6H_{12}O$	160.8	22	156.3	-2.3 (20%)
Propoxy-glycol	$C_5H_{12}O_2$	151.35	72	149.8	-1.8 (70%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	62	151.5	-2.5 (50%)

Ethylisobutyrate ($C_6H_{12}O_2$) (b.t. = 110.1) +
Alcohols

Lecat, 1949.

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Propyl alcohol	C_3H_8O	97.2	75	96.5	-3.5 (75%)
Butyl alcohol	$C_4H_{10}O$	117.8	17	109.4	-2.2 (17%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	52	105.4	-4.8 (50%)
Allyl alcohol	C_3H_6O	96.85	75	96.2	-

Methylisobutyrate ($C_5H_{10}O_2$) (b.t. = 92.5) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	CH_4O	64.65	83	64.4	-2.5 (80%)
Ethyl alcohol	C_2H_6O	78.3	58	77.0	-2.3 (85%)
Propyl alcohol	C_3H_8O	97.2	27	89.7	-4 (25%)
Isopropyl alcohol	C_3H_8O	82.42	65	81.4	-7.2 (65%)
sec. Butyl alcohol	$C_4H_{10}O$	99.5	23	92.0	-3.8 (25%)
tert. Butyl alcohol	$C_4H_{10}O$	82.45	80	82.2	-
Allyl alcohol	C_3H_6O	96.85	28	89.8	-

Propylisobutyrate ($C_7H_{14}O_2$) (b.t. = 134.0) +
Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Amylalcohol	$C_5H_{12}O$	138.2	19	133.5	
Isoamyl alcohol	$C_5H_{12}O$	131.9	53	130.2	
Ethylene chlorhydrin	C_2H_5OCl	128.6	94	128.3	

Isopropylisobutyrate ($C_7H_{14}O_2$) + Butylalcohol
($C_4H_{10}O$)

Lecat, 1949

		b.t.			
		%			
		0	120.8		
		54	115.5		
		100	117.8		

Lecat, 1949

Isobutylisobutyrate ($C_8H_{16}O_2$) (b.t. = 148.6) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	6	147.2	-
Methyl lactate	$C_4H_8O_3$	143.8	70	141.5	-3.2 (50%)
Ethyl lactate	$C_5H_{10}O_3$	154.1	30	146.5	-2.5 (30%)

Lecat, 1949

Isoamylisobutyrate ($C_9H_{18}O_2$) (b.t. = 169.8) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	
Glycol	$C_2H_6O_2$	197.4	18	162.5	
Butoxy-glycol	$C_6H_{14}O_2$	171.15	36	166.5	
Propyl lactate	$C_6H_{12}O_3$	172.7	40	167.5	

Lecat, 1949

Ethylvalerate ($C_7H_{14}O_2$) (b.t. = 145.45) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix or Sat.t.
Glycol	$C_2H_6O_2$	197.4	4.5	144.8	30 (4.5%)
Propoxy-glycol	$C_5H_{12}O_2$	151.35	20	144.1	-2.2 (50%)
Methyl lactate	$C_4H_8O_3$	143.8	58	140.0	-

Lecat, 1949

Methylisovalerate ($C_6H_{12}O_2$) (b.t. = 116.5) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	40	113.5	-3.3 (40%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	73	107.5	-3 (83%)
Methyl propyl carbinol	$C_5H_{12}O$	119.8	20	115.8	-
Methoxy-glycol	$C_3H_8O_2$	124.5	15	115.0	-0.8 (10%)

Lecat, 1949

Ethylisovalerate ($C_7H_{14}O_2$) (b.t. = 134.7) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Methoxy-glycol	$C_3H_8O_2$	124.5	94	124.0	-
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	42	130.0	-2.2 (50%)
2-Chlor-1-propanol	C_3H_7OCl	133.7	60	133.5	-

Lecat, 1949

Propylisovalerate ($C_8H_{16}O_2$) (b.t. = 155.7) +
Alcohols

Name	Formula	2nd Comp.		Az	
		b.t.	%	b.t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	31	154.2	-2.5 (30%)
Cyclohexanol	$C_6H_{12}O$	160.8	17	155.1	-
Propoxy-glycol	$C_5H_{12}O_2$	151.35	65	147.5	-
Ethyl lactate	$C_5H_{10}O_3$	154.1	60	151.0	-2.5

Lecat, 1949

Methylcaproate ($C_7H_{14}O_2$) (b.t. = 149.8) +
Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	
Glycol	$C_2H_6O_2$	197.4	7	148.0	
Methyl lactate	$C_4H_8O_3$	143.8	70	141.7	
Ethyl lactate	$C_5H_{10}O_3$	154.1	37	148.0	

Lecat, 1949

Isobutylisovalerate ($C_9H_{18}O_2$) (b.t. = 171.2) +
Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Heptyl alcohol	$C_7H_{16}O$	176.15	8	171.0	-0.6 (5%)
Glycol	$C_2H_6O_2$	197.4	21	163.5	-
Pinacol	$C_6H_{14}O_2$	176.15	10	169.8	-
Butoxy-glycol	$C_6H_{14}O_2$	171.15	43	167.7	-2.2 (40%)
Methoxydi-glycol	$C_5H_{12}O_3$	192.95	-	170.5	-
Propyl lactate	$C_6H_{12}O_3$	172.7	52	169.0	-1.3 (50%)
Methyl cyclohexanol	$C_7H_{14}O$	168.5	62	167.5	-2.3 (60%)

Lecat, 1949

Isoamylisovalerate ($C_{10}H_{20}O_2$) (b.t.=192.7)
+ Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	Dt mix
Octyl alcohol	$C_8H_{18}O$	195.2	15	192.55	-1.8 (28%)
Glycol	$C_2H_6O_2$	197.4	28	174.85	-
Methoxydiglycol	$C_5H_{12}O_3$	192.95	45	185.0	-
Glycol monoacetate	$C_4H_8O_3$	190.9	57	187.0	-
Linalool	$C_{10}H_{18}O$	198.6	-	192.4	-

Lecat, 1949

Esters + Alcohols

Name	2nd Comp.		Az		
	Formula	b.t.	%	b.t.	
Ethyl caproate +	$C_8H_{16}O_2$	167.7	25	166.0	
Butoxy-glycol	$C_6H_{14}O_2$	171.15			
Ethyl heptanoate +	$C_9H_{18}O_2$	188.7	30	174.0	
Glycol	$C_2H_6O_2$	197.4			
Methyl caprylate +	$C_9H_{18}O_2$	192.9	31	175.0	
Glycol	$C_2H_6O_2$	197.4			
Ethyl caprylate +	$C_{10}H_{20}O_2$	208.35	41	182.5	
Glycol	$C_2H_6O_2$	197.4			
Ethyl caprylate +	$C_{10}H_{20}O_2$	208.35	-	202.0	
Isoamyl lactate	$C_8H_{16}O_3$	202.4			
Ethyl caprylate +	$C_{10}H_{20}O_2$	208.35	82	204.8	
Benzyl alcohol	C_7H_8O	205.25			
Methyl pelargonate +	$C_{10}H_{20}O_2$	213.8	45	186.0	
Glycol	$C_2H_6O_2$	197.4			
Ethyl pelargonate +	$C_{11}H_{22}O_2$	227	-	190.8	
Glycol	$C_2H_6O_2$	197.4			

Methyl caprylate ($C_9H_{18}O_2$) + Butyl alcohol
($C_4H_{10}O$)

Sedgwick, Hoerr and Harwood, 1952

		%	f. t.
		75.08	-50
		42.55	-40

Methyl laurate ($C_{13}H_{26}O_2$) + Methyl alcohol
(CH_4O)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.9	-30
98.7	-20
95.02	-10
55.5	0

Methyl laurate ($C_{13}H_{26}O_2$) + Butyl alcohol
($C_4H_{10}O$)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.7	-50
99.3	-40
97.9	-30
94.2	-20
84.2	-10
37.7	0

Methyl tridecanoate ($C_{14}H_{28}O_2$) + Methyl alcohol
(CH_4O)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.7	-20
97.3	-10
73.4	0

Methyl tridecanoate ($C_{14}H_{28}O_2$) + Butyl alcohol
($C_4H_{10}O$)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.9	-50
99.6	-40
98.2	-30
94.8	-20
86.3	-10
47.5	0

Methyl myristate ($C_{15}H_{30}O_2$) + Butyl alcohol
($C_4H_{10}O$)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.9	-30
99.0	-20
96.4	-10
90.3	0
67.1	10

Methyl palmitate ($C_{17}H_{34}O_2$) + Methyl alcohol
(CH_4O)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.9	0
98.6	10
78.7	20

Methyl palmitate ($C_{17}H_{34}O_2$) + Butyl alcohol
($C_4H_{10}O$)

Sedgwick, Hoerr and Harwood, 1952

%	f. t.
99.9	-20
99.3	-10
97.8	0
92.4	10
66.7	20

Ethyl palmitate ($C_{18}H_{36}O_2$) + Ethyl alcohol
(C_2H_6O)

Neirinckx, 1953

mol%	f. t.	mol%	f. t.
92	5.5	40	16.9
90	8.25	30	17.85
88	10.4	12	19.55
84	12	9	20
80	12.9	6	20.75
70	14	2	21.9
60	15	0	22.9
50	15.9		

Methyl vinyl carbinol acetate ($C_6H_{10}O_2$) + 2,3-
Butylene glycol 1 ($C_4H_{10}O_2$)

Othmer, Shlechter and Koszalka, 1945

mol%		b. t.
L	V	
0	0	179.0
0.8	10.0	175.5
2.4	24.8	170.4
4.7	54.8	156.0
6.9	63.5	150.4
11.6	72.5	141.2
17.9	80.4	133.9
46.4	91.7	120.5
75.7	97.5	114.9
86.5	98.6	114.0
88.3	98.8	113.5
100	100	111.8

%	n_D	%	n_D
24°			
0	1.3990	52.30	1.4155
9.92	1.4025	55.00	1.4160
18.19	1.4040	58.02	1.4168
24.96	1.4060	61.28	1.4178
30.77	1.4080	64.81	1.4190
35.61	1.4100	69.08	1.4205
39.82	1.4115	73.71	1.4220
43.42	1.4125	76.76	1.4230
46.74	1.4139	84.79	1.4260
49.70	1.4150	92.32	1.4285
52.40	1.4160	100	1.4310

Triolein ($C_{57}H_{104}O_6$) + Ethyl alcohol (C_2H_6O)

Bingham, 1907

C.S.T. = 145°

Triolein ($C_{57}H_{104}O_6$) + Menthol ($C_{10}H_{18}O$)

Castiglioni, 1934

%	d	η
20°		
0	0.9136	5869.2
5	0.9123	5547.3
10	0.9114	5192.5
15	0.9106	4869.9
20	0.9101	4444.0

Methyl acrylate ($C_5H_8O_2$) (b. t. = 80.0) +
Alcohols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
Methyl alcohol	CH_4O	64.65	54.0	62.5
Ethyl Alcohol	C_2H_6O	78.3	42.5	73.5
Propyl alcohol	C_3H_8O	97.2	5.4	79.0
Isopropyl alcohol	C_3H_8O	82.4	46.5	76.0

Methyl metacrylate ($C_5H_8O_2$) + Methyl alcohol
(CH_4O)

Woods, 1947

%	mol%	%	mol%	b. t.
L		V		
200mm				
0	0	0	0	61.5
1.0	3.1	4.0	11.5	56.0
2.0	6	10.0	25.7	50.0
4.0	11.5	19.5	43.1	46.5
6.0	16.6	30.0	57.2	44.2
8.0	21.4	36.2	64.0	43.2
10.0	25.7	38.0	65.7	41.9
15.0	35.5	43.0	70.2	39.4
20.0	43.9	48.0	74.2	38.1
25.0	51	52.0	77.2	37.2
30.0	57.25	54.5	78.9	36.4
40.0	67.6	57.0	80.5	36.3
50.0	75.7	62.5	83.9	35.1
60.0	82.3	67.6	86.7	34.9
70.0	87.9	72.8	88.3	34.7
80.0	92.6	80.4	92.8	34.6
85.0	94.6	83.4	94.0	34.6
90.0	96.5	88.3	95.9	34.7
95.0	98.35	93.1	97.7	34.9
100.0	100	100.0	100.0	35.2
760mm				
0	0	0	0	99.5
1	3.1	5.7	15.0	96.6
2	6	12.0	29.0	92.5
4	11.5	21.2	46.2	84.5
6	16.6	28.4	55.5	79.0
8	21.4	33.6	61.3	76.3
10	25.7	37.6	65.4	74.2
15	35.5	42.1	69.3	71.2
20	43.9	48.0	74.25	69.6
25	51	52.2	77.4	68.2
30	57.25	55.4	79.6	67.2
40	67.6	59.8	82.4	66.0
50	75.7	64.2	84.8	65.6
60	82.3	69.7	87.7	65.1
70	87.9	75.3	90.4	64.8
80	92.6	81.1	92.9	64.4
85	94.6	85.0	94.7	64.2
90	96.5	89.0	96.5	64.4
95	98.35	94.9	98.3	64.5
100	100	100.0	100.0	64.6

%			d			n _D		
			20°					
0			0.9441			1.4140		
1.0			0.9408			1.4135		
2.0			0.9398			1.4128		
4.0			0.9366			1.4117		
6.0			0.9323			1.4100		
8.0			0.9288			1.4078		
10.0			0.9263			1.4060		
15.0			0.9178			1.4012		
20.0			0.9093			1.3966		
25.0			0.9016			1.3917		
30.0			0.8823			1.3876		
40.0			0.8778			1.3780		
50.0			0.8619			1.3690		
60.0			0.8470			1.3600		
70.0			0.8323			1.3518		
80.0			0.8172			1.3437		
85.0			0.8112			1.3400		
90.0			0.8045			1.3360		
95.0			0.7986			1.3326		
100.0			0.7916			1.3300		

%			b. t.		
0			43	(103mm)	
84.4			64.5	(760mm) Az	
100			64.7		

%			b. t.		
0			43		
72.7			77.5	Az	
100			78.3		

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Octyl alcohol	C ₈ H ₁₈ O	195.2	-	186.0	
Isooctyl alcohol	C ₈ H ₁₈ O	180.4	-	179.2	
Glycol	C ₂ H ₆ O ₂	197.4	24	179.5	
Methoxy-diglycol	C ₅ H ₁₂ O ₃	192.95	30	181.5	

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Methyl alcohol	CH ₄ O	64.65	70	62.7	-6.3 (70%)
Ethyl alcohol	C ₂ H ₆ O	78.3	52	75.0	-5 (50%)
Propyl alcohol	C ₃ H ₈ O	97.2	26	86.4	-6.0 (25%)
Isopropyl alcohol	C ₃ H ₈ O	82.42	56	78.8	-8.5 (50%)
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	9	90.05	-9.2 (50%)
sec. Butyl alcohol	C ₄ H ₁₀ O	99.5	15	89.0	-6.5 (15%)
tert. Butyl alcohol	C ₄ H ₁₀ O	82.45	67	80.65	-6.5 (67%)
Allyl alcohol	C ₃ H ₆ O	96.85	23	86.4	-6.5 (20%)
Butyl mercaptan	C ₄ H ₁₀ S	97.5	30	88.2	-

Lecat, 1949

Ethylcarbonate ($C_5H_{10}O_3$) (b.t. = 126.5) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	63	116.5	-4.4
Amyl alcohol	$C_5H_{12}O$	138.2	4	125.5	-1.0 (4%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	26.5	125.3	-6.4 (50%)
Cyclopentanol	$C_5H_{10}O$	140.85	-	125.0	-
Ethylene chlorhydrin	C_2H_5OCl	128.6	28	125.7	-

Lecat, 1949

Isobutylcarbonate ($C_9H_{18}O_3$) (b.t. = 190.3) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Octyl alcohol	$C_8H_{18}O$	195.2	7	189.5	-2.2 (20%)
Isooctyl alcohol	$C_8H_{18}O$	180.4	-	180.0	-1.2 (90%)
Glycol	$C_2H_6O_2$	197.4	28	180.5	-
Linalool	$C_{10}H_{18}O$	198.6	4	189.8	-1.5 (10%)

Lecat, 1949

Isoamylcarbonate ($C_{11}H_{22}O_3$) (b.t. = 232.2) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	
Decyl alcohol	$C_{10}H_{22}O$	232.8	36	230.9	
Glycol	$C_2H_6O_2$	197.4	49	188.45	
Citronellol	$C_{10}H_{20}O$	224.4	-	224.2	
Geraniol	$C_{10}H_{18}O$	229.6	65	229.2	
Phenyl propanol	$C_9H_{12}O$	235.6	5	231.8	
Cinnamic alcohol	$C_9H_{10}O$	257.6	-	256.7	

Methyl oxalate ($C_4H_6O_4$) + Trimethylcarbinol
($C_4H_{10}O$)

Ampola and Rimatori, 1896

%	D f.t.	%	D f.t.
0.42	-0.14	5.93	-2.06
0.78	0.28	7.31	2.47
1.35	0.51	3.85	2.96
1.79	0.60	10.46	3.48
2.48	0.85	14.67	4.70
3.51	1.24	21.29	6.42
4.75	1.68	31.83	7.86

Methyl oxalate ($C_4H_6O_4$) + Capryl alcohol
($C_8H_{18}O$)

Ampola and Rimatori, 1896

%	D f.t.	%	D f.t.
0.33	-0.12	5.79	-1.60
0.67	0.20	7.54	1.89
1.25	0.40	8.27	2.22
1.83	0.56	9.60	2.54
2.50	0.75	11.53	2.91
3.72	1.04	15.21	3.60
4.73	1.32	19.86	4.34

Lecat, 1949

Methyl oxalate ($C_4H_6O_4$) (b.t. = 165.45) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Heptyl alcohol	$C_7H_{16}O$	176.15	-	163.8	-
Isooctyl alcohol	$C_8H_{18}O$	180.4	14	164.0	-
Glycol	$C_2H_6O_2$	197.4	14	163.8	-
Pinacol	$C_6H_{14}O_2$	174.35	19	163.3	48.3 (19%)
Cyclohexanol	$C_6H_{12}O$	160.8	59	155.6	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	-	161.2	-

Methyl oxalate ($C_4H_6O_4$) + Glycerol diethyl ether
($C_7H_{14}O_3$)

Ampola and Rimatori, 1896

%	D f. t.	%	D f. t.
0.24	-0.07	4.00	-0.86
0.71	0.20	6.02	1.27
1.30	0.30	8.66	1.77
1.96	0.46	13.68	2.86
2.65	0.60	19.87	4.20

Ethyl oxalate ($C_6H_{10}O_4$) + Ethyl alcohol
(C_2H_6O)

Peel, Madgin and Briscoe, 1928

50 vol% $D_v = 0$
 $D_t = -6.85^\circ$

Ethyl oxalate ($C_6H_{10}O_4$) + Isooctyl alcohol
($C_8H_{18}O$)

Lecat, 1949

%	b. t.		Dt mix
0	185.65		
67	178.75	Az	-3.5
100	180.4		

Ethyl oxalate ($C_6H_{10}O_4$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.	
0	185.65	
25	176.5	Az
100	197.4	

Methyl succinate ($C_6H_{10}O_4$) + Octyl alcohol
($C_8H_{18}O$)

Lecat, 1949

%	b. t.	Dt mix
0	195.5	
50	192.55	-7.5
100	195.2	

Ethyl succinate ($C_8H_{14}O_4$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, Henderson and Fairlir, 1907

t	d	t	d	t	d
20.6721%		79.9261%		100%	
19.35	1.07203	20.1	1.1684	16.8	1.2087
25.55	1.06552	32.0	1.1562	37.2	1.1878
33.95	1.0567	36.75	1.1515	46.8	1.1783
43.3	1.0471	42.9	1.1450	58.3	1.1665

t	(α) _D	t	(α) _D	t	(α) _D
20.6721%		79.9261%		100%	
11.6	8.39	13.2	6.94	20.1	7.67
23.1	9.67	20.8	7.87	33.7	9.10
31.5	10.45	34.2	9.30	37.6	9.56
44.4	11.57	42.0	10.05	46.1	10.24
49.9	12.08	49.0	10.69	55.1	10.94

Butyl sebacate ($C_{18}H_{34}O_4$) + Methyl alcohol
(CH_4O)

Colmant, 1954

mol%	p	mol%	p
20°		18°	
0.00	0.0	0.0	35.80
2.96	7.155	-	43.47
3.39	8.17	-	49.81
4.68	11.10	10.15	55.71
4.82	11.50	-	65.42
6.27	14.63	13.335	73.27
7.62	17.575	16.04	80.10
8.41	19.15	17.455	82.66
10.83	24.315	22.16	87.53
11.80	26.03	-	90.33
13.19	28.94	26.35	92.54
17.65	36.77	33.42	94.07
20.30	41.16	37.38	95.45
23.24	45.72	41.46	97.34
27.28	51.48	-	100
31.07	56.37	51.00	97.35

mol%	d	mol%	d
20°			
0	0.9382	79.4	0.8928
21.07	0.9342	85.8	0.87755
30.63	0.9314	94.4	0.8404
60.9	0.9160	100.0	0.7916

DIMETHYL METHYLSUCCINATE + ETHYL ALCOHOL

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Methyl fumarate ($C_6H_8O_4$) (b.t.=193.25) + Alcohols			
Lecat, 1949			
2nd Comp.		Az	
Name	Formula	b.t.	%
Octyl alcohol	$C_8H_{18}O$	195.2	28
Glycol	$C_2H_6O_2$	197.4	33
Methoxy-diglycol	$C_5H_{12}O_3$	192.9	44
Glycol monoacetate	$C_4H_8O_3$	190.9	65
Lecat, 1949			
2nd Comp.		Az	
Name	Formula	b.t.	%
Octyl alcohol	$C_8H_{18}O$	195.2	68
Glycol	$C_2H_6O_2$	197.2	42
Isoamyl lactate	$C_8H_{16}O_3$	202.4	-
Linalool	$C_{10}H_{18}O$	198.6	60
Borneol	$C_{10}H_{18}O$	215.0	22
l-Terpineol	$C_{10}H_{18}O$	218.85	-
Ethyl maleate ($C_8H_{12}O_4$) + Ethyl tartrate ($C_8H_{14}O_6$)			
Patterson, Henderson and Fairlie, 1907			
t	d	t	d
0%	20.6774%	79.9308%	
10	1.07898	20.3	1.0943
25.2	1.0634	25.95	1.0885
32.5	1.05637	33.05	1.0814
44.2	1.0445	44.4	1.0698

Methyl fumarate ($C_6H_8O_4$) (b.t.=193.25) + Alcohols			
Lecat, 1949			
2nd Comp.		Az	
Name	Formula	b.t.	%
Octyl alcohol	$C_8H_{18}O$	195.2	28
Glycol	$C_2H_6O_2$	197.4	33
Methoxy-diglycol	$C_5H_{12}O_3$	192.9	44
Glycol monoacetate	$C_4H_8O_3$	190.9	65
Lecat, 1949			
2nd Comp.		Az	
Name	Formula	b.t.	%
Octyl alcohol	$C_8H_{18}O$	195.2	68
Glycol	$C_2H_6O_2$	197.2	42
Isoamyl lactate	$C_8H_{16}O_3$	202.4	-
Linalool	$C_{10}H_{18}O$	198.6	60
Borneol	$C_{10}H_{18}O$	215.0	22
l-Terpineol	$C_{10}H_{18}O$	218.85	-
Ethyl maleate ($C_8H_{12}O_4$) + Ethyl tartrate ($C_8H_{14}O_6$)			
Patterson, Henderson and Fairlie, 1907			
t	d	t	d
0%	20.6774%	79.9308%	
10	1.07898	20.3	1.0943
25.2	1.0634	25.95	1.0885
32.5	1.05637	33.05	1.0814
44.2	1.0445	44.4	1.0698

Dimethyl methylsuccinate ($C_7H_{12}O_4$) + Ethyl alcohol (C_2H_6O)			
Bernier and Leonarden, 1939			
%	d	(α) _D	
20°			
14.07	1.022	+4.40	
36.51	0.953	+2.53	
69.71	0.862	-0.21	
88.51	0.818	-1.17	

Ethyl fumarate ($C_8H_{12}O_4$) + Ethyl tartrate ($C_8H_{10}O_6$)					
Patterson, Henderson and Fairlie, 1907					
t	(α) _D	t	(α) _D	t	d
20.6774%		79.9308%			
12.0	+12.77	13.3	8.07		
21.4	13.30	25.2	9.29		
31.1	13.98	38.7	10.46		
41.4	14.52	46.9	11.30		
50.8	15.01	53.3	11.78		
Lecat, 1949					
Ethyl maleate ($C_8H_{12}O_4$) (b.t. = 123.3) + Alcohols					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Glycol	$C_2H_6O_2$	197.4	55	193.1	79
l-Terpineol	$C_{10}H_{18}O$	218.85	80	218.3	-5.6
					(50%)
Citronellol	$C_{10}H_{18}O$	224.4	50	222.3	-
Diglycol	$C_4H_{10}O_3$	245.5	10	222.65	-1.1
					(50%)
Ethyl fumarate ($C_8H_{12}O_4$) (b.t.=217.85) + Alcohols					
Lecat, 1949					
2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Glycol	$C_2H_6O_2$	197.4	43.5	189.35	79.5
					(48.5%)
Diglycol	$C_4H_{10}O_3$	245.5	10	217.1	-0.5
					(50%)
Menthol	$C_{10}H_{18}O$	216.3	70	216.0	-
Ethyl fumarate ($C_8H_{12}O_4$) + Ethyl tartrate ($C_8H_{10}O_6$)					
Patterson, Henderson and Fairlie, 1907					
t	d	t	d	t	d
0%		20.67835%		79.982%	
20.6	1.05189	15.95	1.0844	19.05	1.17178
30.23	1.04210	24.1	1.0760	31.3	1.15884
33.25	1.03897	32.3	1.0674	37.0	1.1530
		42.05	1.0573	48.8	1.1409
0%		20.67835%		79.982%	
t	(α) _D	t	(α) _D	t	(α) _D
20.67835%		79.982%			
11.0	+12.76	14.0	8.31		
20.1	+13.53	23.7	9.38		
31.5	+14.26	29.8	9.95		
38.8	+14.73	40.9	10.91		
51.9	+15.49	46.3	11.41		
Tricaprin ($C_{33}H_{62}O_6$) + Ethyl alcohol (C_2H_6O)					
Loskit, 1928					
%	f.t.	%	f.t.	%	f.t.
7.39	35	88.17	24.9		
14.76	55	90.13	25.1		
16.70	65	92.56	24.2		
26.20	69	94.19	23.4		
31.60	69	96.14	20.8		
64.72	60.8	97.99	17.6		
70.68	58.5	99.01	13.8		
85.64	25.2	99.56	9.5		
87.28	25.4				

2,3-Butylene glycol diacetate ($C_8H_{14}O_4$) + 2,3-Butylene glycol 1 ($C_4H_{10}O_2$)

Othmer, Shlechter and Koszalka, 1945

mol%	mol%	b. t.	mol%	b. t.
L	V	760mm	V	500mm
0	0	192.7	0	177.5
5	7.5	189.8	10.5	173.6
10	14.7	187.2	17.5	171.8
20	28.5	184.0	28.5	168.8
30	37.7	182.0	38.7	167.0
40	46.7	180.5	47.7	165.9
50	55.7	179.3	56.0	165.2
60	63.5	178.3	63.0	164.8
70	72.0	177.7	70.5	164.7
80	79.0	177.6	76.6	164.7
90	86.8	178.0	85.0	165.1
95	92.0	178.4	90.7	165.4
100	100	179.0	100	165.7

		350mm		250mm
0	0	165.6	0	154.5
5	12.0	162.4	12.0	152.0
10	20.0	160.5	21.5	150.0
20	29.7	158.0	32.5	147.4
30	38.7	156.3	41.2	145.5
40	47.2	154.8	48.6	144.5
50	55.7	153.7	55.5	143.7
60	62.5	153.1	62.0	143.5
70	68.5	153.0	72.0	143.9
80	74.5	153.2	81.8	144.5
90	83.5	153.8	89.0	144.7
95	90.0	154.2	100	145.1
100	100	154.8		

%	Az	p	b. t.
77.0		760	177.6
71.2		500	164.6
67.5		350	153.0
63.2		250	143.4

%	n_D	%	n_D
24°			
0	1.4130	50.2	1.4195
8.74	1.4140	53.1	1.4200
17.05	1.4150	56.1	1.4210
22.30	1.4155	59.9	1.4215
28.25	1.4165	65.4	1.4230
33.10	1.4170	71.2	1.4240
37.50	1.4175	77.9	1.4255
41.00	1.4185	84.5	1.4270
44.20	1.4190	92.3	1.4290
46.80	1.4195	100	1.4300
49.45	1.4200		

Lecat, 1949

Methoxyglycol acetate ($C_7H_{10}O_3$) (b. t. = 144.6) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Amyl alcohol	$C_5H_{12}O$	138.2	-	137.0	-
Methyl lactate	$C_4H_8O_3$	143.8	55	143.2	-
Cyclopentanol	$C_5H_{10}O$	140.85	75	139.0	-7.0 (50%)

Lecat, 1949

Ethoxyglycol acetate ($C_6H_{12}O_3$) (b. t. = 156.8) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Hexyl alcohol	$C_6H_{14}O$	157.85	37	156.6	-7.1 (50%)
Propoxyglycol	$C_5H_{12}O_2$	151.35	87.5	151.25	-1.5 (88.5%)

Lecat, 1949

Butoxyglycol acetate ($C_8H_{16}O_3$) (b. t. = 187.8) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	12	171.0	-
Propylene glycol	$C_3H_8O_2$	187.8	-	170.0	-
Butyl glycol	$C_4H_{10}O_2$	171.15	53	170.1	-2.3 (50%)
Furfuryl alcohol	$C_5H_6O_2$	169.35	82	168.5	-

Lecat, 1949

Ethoxydiglycol acetate ($C_8H_{12}O_4$) (b.t. = 228.5) +
Alcohols

2nd Comp.		Az		
Name	Formula	b.t.	%	b.t.
Glycol	$C_2H_6O_2$	197.4	-	195.0
l-Terpineol	$C_{10}H_{18}O$	218.85	47	218.0

Methyl dimethoxysuccinate ($C_8H_{14}O_6$) + Methyl
alcohol (CH_4O)

Purdie and Barbour, 1901

%	d	(α) _D
20°		
76.9849	0.8591	78.90
87.9194	0.8276	76.32
93.7412	0.8102	81.04
100	0.7927	-

Propyl dimethoxysuccinate ($C_{12}H_{22}O_6$) + Methyl
alcohol (CH_4O)

Purdie and Barbour, 1901

%	d	(α) _D
20°		
0	1.0608	84.9
76.2915	0.8479	85.79
87.6303	0.8213	84.50
93.3429	0.8086	84.99

Dimethyl acetyl malate ($C_8H_{12}O_6$) + Methyl alcohol
(CH_4O)

Walden, 1906

%	D b.t.
96.02	+0.125
93.00	0.249
89.03	0.429
85.54	0.587
81.23	0.789

Isobutyl diacetyl tartrate ($C_{16}H_{26}O_6$) + Ethyl
alcohol (C_2H_6O)

Freundler, 1895

%	(α) _D
20°	
98.535	+13.1
87.13	13.3
74.825	12.3

Methyl acetoacetate ($C_5H_8O_3$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Pollock, 1914

t	d	(α) _D
0%		
20	1.0757	
10.2123%		
15.3	1.092	10.92
22	1.086	11.57
35.1	1.072	12.15
43.2	1.064	12.67
54	1.052	13.15
25.2268%		
16.9	1.1103	10.35
23.5	1.1030	10.84
35.1	1.0910	11.67
44.2	1.0810	12.18
57.3	1.0670	12.82
50.4615%		
15.6	1.143	9.04
21.7	1.137	9.51
37.4	1.121	10.86
47.0	1.111	11.59
56.2	1.102	12.1
for 100% see: ethyl succinate + ethyl tartrate		

Ethyl acetoacetate ($C_6H_{10}O_3$) + Methyl alcohol
(CH_4O)

Brühl and Schröder, 1905

%	d	t	H_α	D	H_β	H_γ
100	0.7980	14.50	1.32948	1.33118	1.33490	1.33801
69.80	0.8562	18.90	1.35138	1.35325	1.35748	1.36103
43.32	0.9177	18.10	1.37470	1.37664	1.38145	1.38542

Ethyl acetoacetate ($C_6H_{10}O_3$) + Ethyl alcohol
(C_2H_6O)

Thouvenot, 1910

%	d	(α) _{magn.}
25°		
100	0.78535	4.095
80.33	0.8235	4.154
50.63	0.8876	4.274
0	1.0227	4.435

Dunstan and Stubbs, 1908 and 1909

%	d	η
25°		
100	0.7875	1067
91.95	0.8025	1023
63.72	0.8605	962.5
53.29	0.8832	979.1
35.98	0.9244	1037.0
0	1.0222	1508.1

Ethyl acetoacetate ($C_6H_{10}O_3$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	violet
20°						
51.011	-5.39	-5.98	-7.55	-8.63	-9.21	-9.80
25.0055	-5.57	-6.39	-7.76	-9.02	-9.57	-
12.7528	-5.57	-6.43	-7.76	-9.02	-9.57	-
4.891	-5.57	-6.54	-7.97	-9.20	-10.63	-11.42
2.4455	-6.13	-7.77	-11.45	-13.09	-14.31	-

Ethyl acetoacetate ($C_6H_{10}O_3$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Pollock, 1914

t	d	(α) _D
0°		
20	1.0284	-
10.4715%		
14	1.0510	8.02
18	1.0470	8.66
46	1.0185	11.48
51	1.0132	11.66
57.5	1.0065	12.40
63	1.0010	12.64
71.5	0.9925	13.13
25.0834%		
14	1.075	7.46
20.4	1.068	8.10
30	1.058	9.06
40.5	1.048	10.01
50.5	1.038	10.78
50.1892%		
15.2	1.117	7.09
20.4	1.111	7.76
30.7	1.101	8.84
43.1	1.088	10.05
54.2	1.077	10.92

for 100%, see.: ethyl succinate +
ethyl tartrateEthyl acetoacetate ($C_6H_{10}O_3$) ketone + enol

Boyaert, 1936

%	n_D	ϵ
20°		
100	1.44321	6.34
90.6	-	7.24
89.2	1.44060	7.34
85.7	1.43975	7.69
79.9	1.43834	8.24
77.1	1.43762	8.50
74.6	1.43692	8.74
66.4	1.43498	9.63
58.5	1.43288	10.48
52.5	1.43126	11.12
47.2	1.43000	11.71
41.7	1.42839	12.37
36.0	1.42690	13.07
35.9	1.42682	13.09
29.4	1.42508	13.90
22.9	1.42330	13.90
21.6	1.42301	14.70
14.6	1.42109	15.71
7.74	1.41922	16.56
7.41	1.41912	16.60
0	1.41706	17.51

Ethyl dimethylacetoacetate ($C_8H_{14}O_3$) + Ethyl tartrate ($C_8H_{14}O_6$)		
Patterson and Pollock, 1914		
t	d	(α) _D
0%		
20	1.0101	-
10.2808%		
11.9	1.035	8.18
21.8	1.025	8.87
35.8	1.0115	10.08
25.1675%		
13.2	1.0602	7.14
21.9	1.0518	8.23
38.4	1.035	9.78
48.8	1.024	10.61
57.1	1.016	11.26
50.3124%		
12.6	1.107	6.54
20.1	1.100	7.38
32.2	1.088	8.69
40.8	1.079	9.47
51.0	1.069	10.46
100%		
16.8	1.2087	-
20.1	-	7.67
33.7	-	9.10
37.6	-	9.56
46.1	-	10.24
46.8	1.1783	-
55.1	-	10.94
58.3	1.1665	-
Ethyl (ethyl)acetoacetate ($C_8H_{14}O_3$) + Ethyl alcohol (C_2H_6O)		
Dunstan and Stubbs, 1908 and 1909		
%	d	η
25°		
100	0.7875	1079
94.56	0.7953	1064
76.20	0.8271	1038
58.76	0.8588	1058
28.69	0.9165	1203
12.13	0.9495	1385
0	0.9750	1679

Ethyl (diethyl)acetoacetate ($C_{10}H_{18}O_3$) + Ethyl alcohol (C_2H_6O)					
Dunstan and Stubbs, 1908 and 1909					
%	d	η			
25°					
100	0.7875	1067			
83.34	0.8112	1094			
79.260	0.8200	1107			
71.440	0.8325	1138			
8.22	0.9491	2188			
0	0.9646	2793			
For 100% : see Ethyl succinate + ethyl tartrate					
Lecat, 1949					
Methyl chloracetate ($C_3H_5O_2Cl$) (b.t. = 129.95) + Alcohols					
Name	Formula	b.t.	%	b.t.	Dt mix
Butyl alcohol	$C_4H_{10}O$	117.8	65	115.5	-7.2 (75%)
Isobutyl alcohol	$C_4H_{10}O$	108.0	88	107.7	-4.0 (88%)
Amyl alcohol	$C_5H_{12}O$	138.2	30	126.8	-4.0 (10%)
Isoamyl alcohol	$C_5H_{12}O$	131.9	39.5	124.9	-9.8 (40%)
2-Pentanol	$C_5H_{12}O$	119.8	60	117.0	-10.0 (50%)
3-Pentanol	$C_5H_{12}O$	116.0	68	114.0	-
Methoxy-glycol	$C_3H_8O_2$	124.5	65	122.5	-
Ethoxy-glycol	$C_4H_{10}O_2$	135.3	23	128.6	-2.0 (50%)
Ethylene chlorhydrin	C_2H_5OCl	128.6	85	128.0	-
Cyclopentanol	$C_5H_{10}O$	140.85	23	127.5	-3.5 (10%)

Lecat, 1949							Butyl chloracetate (C ₆ H ₁₁ O ₂ Cl) + Glycol (C ₂ H ₆ O ₂)						
Ethyl chloracetate (C ₄ H ₇ O ₂ Cl) (b.t. = 143.55) + Alcohols							Lecat, 1949						
2nd Comp.			Az				%			b.t.			
Name	Formula	b.t.	%	b.t.	Dt mix		0	181.9					
Isoamyl alcohol	C ₅ H ₁₂ O	131.9	77	131.0	-7.0 (41%)		30	176.0	Az				
Hexyl alcohol	C ₆ H ₁₄ O	157.85	10	143.3	-2.5 (10%)		100	197.4					
Ethoxyglycol	C ₄ H ₁₀ O ₂	135.3	68	134.8	-2.3 (50%)								
Methyl lactate	C ₄ H ₈ O ₃	143.8	51	140.4	-1 (50%)								
Cyclopentanol	C ₅ H ₁₀ O	140.85	50	137.6	-6.5 (50%)								
Ethyl chloracetate (C ₄ H ₇ O ₂ Cl) + Methyl malate 1 (C ₆ H ₁₀ O ₅)							Lecat, 1949						
Grossmann and Landau, 1910							Isoamyl chloracetate (C ₇ H ₁₃ O ₂ Cl) (b.t. = 195.0) + Alcohols						
2nd Comp.			Az				%			b.t.			
Name	Formula	b.t.	%	b.t.	Dt mix		0	181.9					
Octyl alcohol	C ₈ H ₁₈ O	195.2	38	193.5	-3.5 (30%)		30	176.0	Az				
Glycol	C ₂ H ₆ O ₂	197.4	38	187.5	-		100	197.4					
Methyl diglycol	C ₅ H ₁₂ O ₃	192.95	55	187.0	-								
Linalool	C ₁₀ H ₁₈ O	198.6	18	194.2	-								
Glycol monoacetate	C ₄ H ₈ O ₃	190.9	50	189.3	-								
Ethyl dichloracetate (C ₄ H ₆ O ₂ Cl ₂) + Hexylalcohol (C ₆ H ₁₄ O)							Lecat, 1949						
2nd Comp.			Az				%			b.t.			
Name	Formula	b.t.	%	b.t.	Dt mix		0	158.1					
Hexyl alcohol	C ₆ H ₁₄ O	157.85	60	156.4	-6.5 (50%)		42	156.0	Az				
Glycol	C ₂ H ₆ O ₂	197.4	20	162.0	-		100	157.85					
Cyclohexanol	C ₆ H ₁₂ O	160.8	50	159.0	-								
Methyl trichloracetate (C ₃ H ₃ O ₂ Cl ₃) + Cyclohexanol (C ₆ H ₁₂ O)							Lecat, 1949						
2nd Comp.			Az				%			b.t.			
Name	Formula	b.t.	%	b.t.	Dt mix		0	152.8					
Hexyl alcohol	C ₆ H ₁₄ O	157.85	60	156.4	-6.5 (50%)		28	151.0	Az				
Glycol	C ₂ H ₆ O ₂	197.4	20	162.0	-		100	160.8					
Cyclohexanol	C ₆ H ₁₂ O	160.8	50	159.0	-								

Ethyl trichloracetate ($C_6H_5O_2Cl_3$) + Methyl cyclohexanol ($C_7H_{14}O$)

Lecat, 1949

%	b. t.	
0	167.2	
38	165.5	Az
100	168.5	

Lecat, 1949

Ethylbromoacetate ($C_4H_7O_2Br$) (b. t. = 158.8) +
Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Hexyl-alcohol	$C_6H_{14}O$	157.85	45	154.0	-
Glycol	$C_2H_6O_2$	197.4	12	157.3	75 (12%)
Propoxy-glycol	$C_5H_{12}O_2$	151.35	95	151.75	-
Cyclo-hexanol	$C_6H_{12}O$	160.8	35	155.5	-
Methyl cyclohexanol	$C_7H_{14}O$	168.5	15	157.5	-

Ethyl chlorcarbonate ($C_2H_5O_2Cl$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)				
		red	yellow	green	pale blue	dark violet blue
20°						
49.905	-3.65	-4.25	-4.81	-5.19	-5.25	-5.05
24.9525	-2.93	-3.21	-3.45	-3.45	-3.09	-
12.4763	-2.48	-2.73	-2.65	-2.32	-1.92	-
4.941	-2.02	-1.62	-1.21	-0.81	-0.61	+0.20
2.4705	-1.62	-0.81	-0.40	-0.00	+0.40	-

Methyl chlorsuccinate d ($C_6H_5O_4Cl$)
+ Methyl tartrate ($C_6H_{10}O_6$)

Timmermans and Vesselowsky, 1932

wt% d	mol%	f. t.
100	100	48
86.3	86.5	44
66.4	66.7	35.5
55.1	55.4	28.5
43.3	43.6	20.5
37.1	37.4	18
32.3	32.6	13
25	25.3	below 3
13	13.2	-5

wt% l	mol%	f. t.
100	100	48
80.7	80.9	41
65.9	66.2	30
53.7	54.0	22
45.1	45.4	18
31.3	31.6	17
24.5	24.8	0
16.7	16.9	below 0

Lecat, 1949

Methyl thioacetate (C_3H_6OS) (b. t. = 95.5) +
Alcohols

2nd Comp.		Az	
Name	Formula	b. t.	%
Ethyl alcohol	C_2H_6O	78.3	-
Propyl alcohol	C_3H_8O	97.2	-
Isopropyl alcohol	C_3H_8O	82.4	-

Ethyl thioacetate (C_4H_8OS) + Isobutyl mercaptan
($C_4H_{10}S$)

Lecat, 1949

%	b. t.
0	95.5
88	87.2
100	87.8

Lecat, 1949

Ethyl thioacetate (C_4H_8OS) (b.t. = 116.6) +
Alcohols

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Butyl alcohol	$C_4H_{10}O$	117.8	-	113.5.
Isobutyl alcohol	$C_4H_{10}O$	108.0	-	107.2
Diethyl carbinol	$C_5H_{12}O$	116.0	-	114.0
Allyl alcohol	C_3H_6O	96.85	-	96.5

Lecat, 1949

Bornyl acetate ($C_{12}H_{20}O_2$) (b.t. = 227.6) +
Alcohols

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	$C_2H_6O_2$	197.4	57	194.0	-
Glycerol	$C_3H_8O_3$	290.5	9	225.9	200
Diglycol	$C_4H_{10}O_3$	245.5	18	223.0	-

Methyl camphorcarbonate ($C_{12}H_{18}O_3$) +
Methyl alcohol (CH_4O)

Brühl and Schröder, 1905

%	t	d	n			
			H_α	D	H_β	H_γ
100	14.50	0.7980	1.32948	1.33118	1.33490	1.33801
72.80	19.40	.8589	.36057	.36228	.36662	.37011
52.11	19.40	.9150	.38908	.39093	.39570	.39956

Lecat, 1949

Benzyl formate ($C_8H_8O_2$) (b.t. = 203.0) +
Alcohols

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	38	186	-
Linalool	$C_{10}H_{18}O$	198.6	-	197.8	-1.2 (90%)
Benzyl alcohol	C_7H_8O	205.25	8	202.9	-2.5 (50%)

Lecat, 1949

Benzyl acetate ($C_9H_{10}O_2$) (b.t. = 215.0) +
Alcohols

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Diglycol	$C_4H_{10}O_3$	245.5	7	214.85	-0.6 (50%)
Borneol	$C_{10}H_{18}O$	215.0	52	213.9	-
Menthol	$C_{10}H_{20}O$	216.3	26.5	213.8	-
l-Terpineol	$C_{10}H_{18}O$	218.85	15	214.85	-4.3 (33%)

Benzyl acetate ($C_9H_{10}O_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	(α) _D
24.89%	
16.3	4.63
20	4.68
31.8	4.72
43.7	4.75
51.7	4.815

Lecat, 1949

Phenyl acetate ($C_8H_8O_2$) (b.t. = 195.7) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat. t.
Octyl alcohol	$C_8H_{18}O$	195.2	47	192.8	-5.8 (50%)
Glycol	$C_2H_6O_2$	197.4	36	181.5	67.7 (36%)
Linalool	$C_{10}H_{18}O$	198.6	37	193.8	-3.4 (30%)
Methoxy- diglycol	$C_5H_{12}O_3$	192.95	45	186.5	-
Glycol monoacetate	$C_4H_8O_3$	190.9	-	190.0	-

Phenyl acetate ($C_8H_8O_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	(α) _D
24.96%	
20	5.28
22.6	5.29
28.2	5.325
39.3	5.395
44.4	5.365

Lecat, 1949

Methyl phenylacetate ($C_9H_{10}O_2$) (b.t. = 215.3) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Borneol	$C_{10}H_{18}O$	215.0	48	214.3	-
l-Terpineol	$C_{10}H_{18}O$	218.85	25	215.0	-3.7 (25%)
Menthol	$C_{10}H_{20}O$	216.3	37	214.5	-

Lecat, 1949

Ethyl phenylacetate ($C_{10}H_{12}O_2$) (b.t. = 228.75) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat. t.
Decyl alcohol	$C_{10}H_{22}O$	232.8	6	228.55	-1.8 (10%)
Glycol	$C_2H_6O_2$	197.4	58	194.0	-
Glycerol	$C_3H_8O_3$	290.5	8	228.5	81 (8%)
Diglycol	$C_4H_{10}O_3$	245.5	20	224.0	-
Geraniol	$C_{10}H_{18}O$	229.6	30	228.1	-3.4 (20%)

Ethyl phenylpropionate ($C_{11}H_{14}O_2$) + Glycerol
($C_3H_8O_3$)

Lecat, 1949

%	b.t.
0	248.1
15	242.0 Az
100	290.5

Lecat, 1949

Methyl benzoate ($C_8H_8O_2$) (b.t. = 199.4) +
Alcohols

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat. t.
Octyl alcohol	$C_8H_{18}O$	195.2	65	194.4	-4.1 (50%)
Glycol	$C_2H_6O_2$	197.4	36.5	182.2	107.5 (36.5%)
Linalool	$C_{10}H_{18}O$	198.6	55	197.5	-3.2 (55%)
Methoxy- diglycol	$C_5H_{12}O_3$	192.95	50	188.8	-
Isoamyl lactate	$C_8H_{16}O_3$	202.4	-	198.8	-

Methyl benzoate ($C_8H_8O_2$) + Glycol ($C_2H_6O_2$)

Mukhin and Mukhina, 1930

%	sat. t.	%	sat. t.
5.0	62.3	45.0	109.5
10.0	85.0	50.0	109.2
15.0	96.5	55.0	108.0
20.0	102.5	60.0	106.5
25.0	105.7	65.0	104.1
30.0	108.0	70.0	101.0
35.0	108.6	75.0	97.1
40.0	109.4	80.0	89.0

Ethyl benzoate ($C_9H_{10}O_2$) + Ethyl alcohol (C_2H_6O)

Raoult, 1890

%	($P_2 - P/P_2$) .100
60°	
84.52	5.2
71.48	10.0
54.19	18.9
35.71	32.5
23.29	44.8
11.31	63.6
4.80	80.6
2.52	87.9

mol%	($P_2 - P/P_2$) .100
78°	
5.33	5.201
10.91	10.00
20.60	18.90

Beckmann, 1890

%	b. t.
100	78.3
98.04	78.435
94.56	78.668
90.18	78.958
83.35	79.427

Tamman and Hirschberg, 1894

mol%	vol.			
	0°	10°	20°	30°
100	1	1.01071	1.02155	1.03303
80.17	1	1.01028	1.02098	1.03203
60.34	1	1.01039	1.02101	1.03199

Hirata, 1908

vol%	η (alcohol =1)
25°	
75	1.0324
87.5	1.0126
93.75	1.0066
96.87	1.0080
98.44	1.0075
99.22	1.0079

Ethyl benzoate ($C_9H_{10}O_2$) (b. t. = 212.5) + Alcohols

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Glycol	($C_2H_6O_2$)	197.4	46	212.5	136 (46%)
Terpineol	($C_{10}H_{18}O$)	210.5	52	209.8	-4.7 (50%)
Borneol	($C_{10}H_{18}O$)	215.0	12	212.25	-

Ethyl benzoate ($C_9H_{10}O_2$) + Glycol ($C_2H_6O_2$)

Mukhin and Mukhina, 1930

%	sat. t.	%	sat. t.
5.0	85.0	50.0	137.0
10.0	110.8	55.0	136.6
15.0	122.0	60.0	136.0
20.0	128.0	65.0	134.1
25.0	132.1	70.0	132.0
30.0	134.6	75.0	128.2
35.0	136.0	80.0	123.3
40.0	136.5	85.0	115.0
45.0	137.0		

Benzylbenzoate ($C_{14}H_{12}O_2$) + Glycerol ($C_3H_8O_3$)

Lecat, 1949

%	b. t.
0	324
55	281.5 Az
100	290.5

Lecat, 1949

Methyl cinnamate ($C_{10}H_{10}O_2$) (b. t.=261.9) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	197.4	85	196.2	101.5
Diglycol	($C_4H_{10}O_3$)	245.5	63	240.0	-
Methoxytri-glycol	($C_7H_{16}O_4$)	245.25	70	242.3	-

Ethyl cinnamate + Methyl malate-1($C_6H_{10}O_5$)
($C_{11}H_{12}O_2$)

Walden, 1906

g/100cc	(α) red	c	(α) green	c	(α) violet	c
20.43	-7.24	1	-10.91	1.51	-14.14	1.95
10.20	-7.25	1	-11.17	1.54	-14.21	1.96
5.10	-7.45	1	-11.18	1.50	-14.51	1.95

c = dispersion constant.

Lecat, 1949

Ethyl cinnamate ($C_{11}H_{12}O_2$) (b. t.=272.0) + Alc.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Glycol	($C_2H_6O_2$)	197.4	72	197.0	
Diglycol	($C_4H_{10}O_3$)	245.25	85	244.5	
Triglycol	($C_6H_{14}O_4$)	288.7	7	271.5	

Ethyl anisate ($C_{10}H_{12}O_3$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	red	yellow	green	(α) pale blue	dark blue	violet
49.772	-6.13	-7.74	-8.64	-10.45	-11.45	-12.56
24.886	-7.27	-9.12	-10.57	-12.82	-13.54	-14.71
12.443	-8.36	-10.53	-11.81	-11.31	-15.27	-16.56
4.997	-8.81	-11.21	-13.41	-15.21	-16.41	-17.41
2.4985	-9.61	-12.01	-15.21	-17.21	-18.81	-

Lecat, 1949

Methyl phthalate ($C_{10}H_{10}O_4$) (b. t.=283.2) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Glycerol	($C_3H_8O_3$)	290.5	31	271.5	-
Diglycol	($C_4H_{10}O_3$)	245.5	96.3	245.4	-0.5 (50%)
Triglycol	($C_6H_{14}O_4$)	288.7	33	277.0	-

Ethyl phthalate ($C_{12}H_{14}O_4$) + Methyl alcohol
(CH_4O)

Foote and Dixon, 1929 and Dornte, 1929

mol%	p	mol%	p
25°			
100.0	126.1	37.5	84.8
96.7	119.1	37.3	81.9
90.0	118.6	34.1	80.0
88.3	117.5	33.5	78.4
87.5	116.5	30.9	75.8
84.8	115.9	30.4	73.5
81.0	113.8	29.7	73.0
80.7	112.9	24.5	66.5
78.4	112.6	22.4	63.4
77.8	111.0	22.4	61.3
76.4	111.1	17.4	53.2
72.2	109.5	15.8	48.0
68.3	107.5	13.7	44.3
64.0	105.3	9.63	32.4
61.7	103.9	9.00	31.7
55.5	98.3	5.50	21.3
49.9	95.1		
49.5	94.6		

ETHYL BENZOATE + METHYL MALATE

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Ethyl benzoate ($C_9H_{10}O_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
49.972	-6.40	-8.10	-9.21	-10.31	-11.01	-11.81
24.986	-7.44	-9.37	-10.85	-12.77	-13.73	-
12.493	-7.92	-9.77	-11.29	-13.45	-14.89	-
4.928	-8.73	-10.35	-11.77	-14.20	-15.22	-15.63
2.464	-9.74	-11.77	-12.99	-15.42	-16.23	-

Lecat, 1949

Propyl benzoate ($C_{10}H_{12}O_2$) (b.t.=230.85) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix or Sat. t.
Decyl alcohol	($C_{10}H_{22}O$)	232.8	23	230.5	-3.4 (45%)
Glycol	($C_2H_6O_2$)	197.4	55	190.35	164
Glycerol	($C_3H_8O_3$)	290.5	95	229.0	-
Methoxy- triglycol	($C_7H_{16}O_4$)	245.25	32	226.0	-
Diglycol	($C_4H_{10}O_3$)	245.5	26	222.7	-

Lecat, 1949

Butyl benzoate ($C_{11}H_{14}O_2$) (b.t.=249.0) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	197.4	65	193.0	178
Glycerol	($C_3H_8O_3$)	290.5	17	242.5	243
Diglycol	($C_4H_{10}O_3$)	245.5	43	232.2	102
Methoxytri- glycol	($C_7H_{16}O_4$)	245.25	52	235.0	-

Lecat, 1949

Isobutylbenzoate ($C_{11}H_{14}O_2$) (b.t.=241.9) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	197.4	60	192.2	172
Glycerol	($C_3H_8O_3$)	290.5	14	237.4	230
Diglycol	($C_4H_{10}O_3$)	245.5	37	228.65	86
Methoxy tri- glycol	($C_7H_{16}O_4$)	245.25	40	231.2	-

Lecat, 1949

Isoamylbenzoate ($C_{12}H_{16}O_2$) (b.t.=262.0) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Glycol	($C_2H_6O_2$)	197.4	67	193.95	182
Glycerol	($C_3H_8O_3$)	290.5	22	251.55	-
Diglycol	($C_4H_{10}O_3$)	245.5	52.5	236.55	116.5
Triglycol	($C_6H_{14}O_4$)	288.7	14	261.4	-
Methoxy- triglycol	($C_7H_{16}O_4$)	245.25	60	239.4	-
Benzyl- glycol	($C_9H_{12}O_2$)	265.2	15	261.0	-

Lecat, 1949

Phenylbenzoate ($C_{13}H_{10}O_2$) (b.t.=315) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Glycerol	($C_3H_8O_3$)	290.5	48	279.8	
Triglycol	($C_6H_{14}O_4$)	288.7	80	286.0	

ETHYL PHTHALATE + ETHYL ALCOHOL

Ethyl phthalate ($C_{12}H_{10}O_4$) + Ethyl alcohol
(C_2H_6O)

Foote and Dixon, 1929 and Dornte, 1929

mol%	p	mol%	p
25°			
100	58.8	53.9	45.3
90.5	54.9	52.7	46.3
88.6	54.4	49.2	44.8
87.5	54.3	44.5	43.4
86.6	54.1	44.3	43.7
86.1	53.6	40.1	41.5
85.2	53.8	38.4	40.4
83.6	53.1	33.0	37.7
83.4	52.9	31.5	37.6
82.8	53.1	29.6	35.7
81.2	52.3	21.6	29.7
78.5	51.7	20.7	29.9
76.2	51.6	17.3	25.9
73.9	51.1	13.5	21.4
73.1	50.9	10.1	16.7
71.4	50.2	7.25	13.0
67.7	50.5	6.40	11.6
67.5	49.8	3.70	6.3
61.3	49.1	0	0
58.0	47.8		
54.3	45.4		

Ethylphthalate ($C_{12}H_{10}O_4$) + Triglycol ($C_6H_{14}O_4$)

Lecat, 1949

%	b. t.
0	298.5
58	285.5 Az
100	288.7

Ethyl 2-oxymethylene phenylacetate ($C_{11}H_{12}O_3$) +
Methyl alcohol (CH_4O)

Brühl, 1900

%	t	d	H_α	n	H_γ
				D	
69.924	17.2	0.8918	1.37912	1.38137	1.39125
100	18.1	0.7947	1.32830	1.32983	1.33662

Ethyl-1 oxymethylene phenylacetate ($C_{11}H_{12}O_3$)
+ Ethyl alcohol (C_2H_6O)

Brühl, 1900

%	t	d	H_α	n	H_γ
				D	
0	22.7	1.1129	1.52909	1.53429	1.56069
74.45	19.8	0.8803	1.39689	1.39928	1.40982
100	21.4	0.8052	1.3607	1.36288	1.37052

Ethyl-2-oxymethylene phenylacetate ($C_{11}H_{12}O_3$) +
Ethyl alcohol (C_2H_6O)

Brühl, 1900

%	t	d	H_α	n	H_γ
				D	
74.41	22.5	0.8788	1.39608	1.39841	1.40864
100	21.4	0.8052	1.36107	1.36288	1.37052

Ethyl-2-oxymethylene (ethoxy) phenylacetate ($C_{13}H_{14}O_4$)
+ Ethyl alcohol (C_2H_6O)

Brühl, 1900

%	t	d	H_α	n	H_γ
				D	
0	22.2	1.1291	1.52184	1.52698	1.55193
80.695	20.6	0.8553	1.38539	1.38772	1.39793
100	21.4	0.8052	1.36107	1.36288	1.37052

Methyl sulfate ($C_2H_6O_4S$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
49.950	-2.19	-2.61	-2.92	-3.26	-3.35	-3.39
24.975	-1.02	-1.20	-1.35	-1.47	-1.55	-
12.4875	-0.50	-0.59	-0.67	-0.73	-0.76	-
4.882	-0.19	-0.22	-0.25	-0.26	-0.24	-0.21
2.441	-0.09	-0.10	-0.10	-0.09	-0.08	-

Methyl acetate ($C_3H_6O_2$) + p-Chlorphenol (C_6H_5OC1)

Weissenberger, Schuster and Lielacher, 1925

mol%	p	mol%	p
20°			
0	169.8	50	37.5
10	146.8	60	21.7
20	129.7	70	9.9
30	89.0	80	3.5
40	60.7	90	1.0

Ethyl acetate ($C_4H_8O_2$) + o-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	10.1
50.0	19.0
40.0	24.5
33.3	30.0
28.0	33.4
25.0	36.1
22.2	38.9

mol%	η	σ
15° (water = 1)		
66.7	3.65	0.465
50.0	1.96	0.437
40.0	1.07	0.424
33.3	1.07	0.409
28.0	0.98	0.400
25.0	0.86	0.395
22.2	0.80	0.392

Ethyl acetate ($C_4H_8O_2$) + m-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	8.8
50.0	17.1
40.0	23.5
33.3	28.6
25.0	34.6
22.2	36.4

mol% η σ

15° (water = 1)

66.7	3.69	0.465
50.0	1.99	0.447
40.0	1.48	0.438
33.3	1.12	0.418
28.0	1.03	0.409
25.0	0.91	0.401
22.2	0.82	0.397

Ethyl acetate ($C_4H_8O_2$) + p-Cresol (C_7H_8O)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p
15°	
66.7	9.2
50.0	18.9
40.0	25.8
33.3	30.9
28.0	35.0
25.0	38.3
22.2	41.2

mol%	η	σ
(water = 1)		
15°		
66.7	3.60	0.465
50.0	1.92	0.427
40.0	1.32	0.410
33.3	1.02	0.399
28.0	0.93	0.392
25.0	0.81	0.388
22.2	0.77	0.387

Ethyl acetate ($C_4H_8O_2$) + Resorcinol ($C_6H_6O_2$)

Cohen, De Meester and Moesveld, 1924

%	d	%	d
30°			
0	0.88797	50.12	1.08622
13.786	.93400	65.905	.12339
25.345	.97310	63.040	.10351
37.525	1.01494	68.498	.12254
46.116	.04463		

Timofeev, 1905

initial	% final	Q dil. (by mole resorc.)
0	2.0	+198
2.0	3.7	0
9.9	11.3	-469
25.7	27.0	-977

Ethyl acetate ($C_4H_8O_2$) + Pyrogallol ($C_6H_6O_3$)

Weissenberger, Schuster and Henke, 1925

mol%	p	η (water = 1)	σ
20°			
33.33	43.8	4.44	0.403
28.00	46.1	2.94	0.382
25.00	52.4	2.03	0.366
22.22	55.0	1.35	0.363
20.00	57.1	0.92	0.363
0	72.8	-	0.360

Ethyl acetate ($C_4H_8O_2$) + Thymol ($C_{10}H_{14}O$)

Carroll, Rollefson and Mathews, 1925

%	f. t.
68.71	1.0
80.5	25.0

Lecat, 1949

Isoamyl butyrate ($C_9H_{18}O_2$) (b. t.=181.05) +

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Phenol	(C_6H_6O)	182.2	52	185.3	+7
o-Cresol	(C_7H_8O)	191.1	93	191.3	-
o-Chlor-phenol	(C_6H_5OCl)	176.8	38	188.0	-
o-Brom-phenol	(C_6H_5OBr)	194.8	72	197.5	-

Butylisovalerate ($C_9H_{18}O_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	177.6
70	184.0 Az
100	182.2

Isobutylisovalerate ($C_9H_{18}O_2$) + o-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.
0	171.2
57	182.8 Az
100	176.8

Lecat, 1949

Isoamylisovalerate ($C_{10}H_{20}O_2$) (b. t.=192.7) +

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
o-Cresol	(C_7H_8O)	191.1	33.3	195.45
o-Chlor-phenol	(C_6H_5OCl)	176.8	15	194.8
o-Brom-phenol	(C_6H_5OBr)	194.8	54	203.0

Ethyl heptoate ($C_9H_{18}O_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	188.7
12	190.0 Az
100	182.2

Ethyl heptoate ($C_9H_{18}O_2$) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	188.7
60	193.7 Az
100	191.1

<p>Methylcaprylate ($C_9H_{18}O_2$) + o-Cresol (C_7H_8O)</p> <p>Lecat, 1949</p> <table> <tr> <th>%</th><th>b. t.</th></tr> <tr> <td>0</td><td>192.9</td></tr> <tr> <td>33</td><td>195.8 Az</td></tr> <tr> <td>100</td><td>191.1</td></tr> </table>	%	b. t.	0	192.9	33	195.8 Az	100	191.1	<p>Glycol diacetate ($C_6H_{10}O_4$) + o-Cresol (C_7H_8O)</p> <p>Lecat, 1949</p> <table> <tr> <th>%</th><th>b. t.</th></tr> <tr> <td>0</td><td>186.3</td></tr> <tr> <td>65</td><td>194.5 Az</td></tr> <tr> <td>100</td><td>191.1</td></tr> </table>	%	b. t.	0	186.3	65	194.5 Az	100	191.1								
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%	b. t.																								
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%	b. t.																								
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%	b. t.																								
0	186.3																								
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0	144.6																								
82	183.6 Az																								
100	182.2																								

Ethoxyglycol acetate ($C_6H_{12}O_3$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	156.8
72	184.95 Az
100	182.2

Ethoxyglycol acetate ($C_6H_{12}O_3$) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	156.8
90	191.65 Az
100	191.1

Lecat, 1949

Butoxyglycol acetate ($C_8H_{16}O_3$) (b. t.=171.75) +

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Phenol	(C_6H_6O)	182.2	55	187.0	-
o-Cresol	(C_7H_8O)	191.1	68	194.1	12
p-Cresol	(C_7H_8O)	201.7	82	203.3	-

Glucose- 2-pentacetate ($C_{16}H_{22}O_{11}$) + Phenol (C_6H_6O)

Marsden, Bainbridge and Morris, 1943

wt%	mol%	f. t.	wt%	mol%	f. t.
100.0	100.0	41.05	51.9	81.8	-4.8
39.3	97.0	38.05	50.2	81.0	2.05
77.0	93.2	29.85	41.6	74.6	30.25
70.4	90.4	25.0	33.0	67.0	50.0
65.2	88.7	18.5	20.5	51.7	87.5
59.2	85.8	7.9	10.2	31.9	115.2
53.5	82.6	-1.15	0.0	0.0	131.8

Cellobiose- 1-octacetate ($C_{28}H_{38}O_{19}$) + Phenol (C_6H_6O)

Marsden, Bainbridge and Morris, 1943

wt%	mol%	f. t.	wt%	mol%	f. t.
100.0	100.0	41.05	11.3	52.0	215.6
73.0	95.0	28.55	7.0	35.4	220.75
60.2	91.5	16.7	4.6	26.0	222.75
56.0	90.2	27.15	3.5	20.7	221.75
43.6	84.8	105.55	1.5	9.8	224.5
29.3	75.0	168.6	0.0	0.0	227.75
18.4	62.0	203.2			

Cellobiose- 1-octacetate ($C_{28}H_{38}O_{19}$) + p-Nitrophenol ($C_6H_5O_3N$)

Marsden, Bainbridge and Morris, 1943

wt%	mol%	f. t.	wt%	mol%	f. t.
100.0	100.0	113.85	24.4	61.4	150.6
95.4	99.0	112.85	22.9	59.2	153.5
89.6	97.5	111.4	19.1	53.6	173.0
83.6	96.5	108.4	13.6	43.5	200.5
76.4	94.0	104.8	6.4	31.6	210.4
69.4	91.6	98.8	6.0	24.0	203.5
61.9	88.8	91.0	5.5	22.4	207.5
58.5	87.3	91.0	4.8	19.7	208.4
54.6	85.4	98.8	4.3	17.7	209.4
52.8	84.5	107.8	3.6	15.3	212.5
50.3	83.1	119.4	3.5	15.0	198.5
45.9	80.5	133.8	3.2	14.0	205.0
38.9	75.7	157.4	2.4	10.9	214.0
29.9	67.5	173.8	2.2	10.0	212.5
26.0	63.2	167.4	1.7	7.5	215.5
25.9	63.0	152.6	0.0	0.0	227.75

(1+2)

Triolein ($C_{57}H_{104}O_6$) + Resorcinol ($C_6H_6O_2$)

Bingham, 1907

C.S.T. = 245°

Triolein ($C_{57}H_{104}O_6$) + Thymol ($C_{10}H_{14}O$)

Seidell, 1912

%	t	d	%	t	d
32.7	13.0	0.9368	40.0	25.0	0.9347
33.5	15.3	.9361	45.3	29.5	.9348
36.7	22.0	.9340	55.9	37.3	.9374

%	d				
	13.0°	20.6°	29.6°	37°	
0	0.9168	0.9130	0.9080	0.9034	
5	.9199	.9160	.9108	.9063	
10	.9230	.9190	.9148	.9092	
15	.9260	.9221	.9167	.9132	
20	.9292	.9252	.9197	.9151	
25	.9320	.9283	.9227	.9180	
30	.9353	.9313	.9256	.9210	
35	.9384	.9344	.9285	.9239	
40	.9414	.9376	.9315	.9269	
45	.9445	.9406	.9345	.9298	
50	.9476	.9436	.9376	.9328	

Triricinolein ($C_{57}H_{104}O_9$) + Thymol ($C_{10}H_{14}O$)

Seidell, 1912

%	t	d
51.71	22.0	0.9504
57.31	29.5	.9621
64.55	37.2	.9719

Cod liver oil, peanut oil, cottonseed oil and linseed oil + Thymol ($C_{10}H_{14}O$)

Seidell, 1912

Density at different temperatures.

Lecat, 1949

Isobutyl carbonate ($C_9H_{18}O_3$) (b.t.=190.3) + Phenols.

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Phenol	(C_6H_6O)	182.2	25	191.5
o-Cresol	(C_7H_8O)	191.1	48	195
p-Cresol	(C_7H_8O)	201.7	89	201.9
p-Chlorphenol	(C_6H_5OCl)	219.75	-	220.5

Lecat, 1949

Isoamyl carbonate ($C_{11}H_{22}O_3$) (b.t.=232.2) +

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Thymol	($C_{10}H_{14}O$)	232.9	48	236.25
Ethylsalicylate	($C_9H_{10}O_3$)	233.8	28	232.0
p-Chlorphenol	(C_6H_5OCl)	219.75	26	236.5

Methyl oxalate ($C_4H_6O_4$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	164.45
95	182.35 Az
100	182.2

Ampola and Rimatori, 1896

%	D f. t.	%	D f. t.
0.37	-0.17	5.71	-3.01
0.75	0.34	7.14	3.81
1.28	0.71	8.91	4.79
2.06	1.09	10.47	5.63
2.89	1.58	11.77	6.40
4.46	2.35	14.96	8.29

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	41.5	56.7	41
94.4	34.0	56	40
89.4	36.0	52.9	39
88.5	37.0	48.9	36
84	42	46.1	35
81.4	45	50	37
80.8	45.5	40	30.5
74.9	47.5	32	33
73.4	47	22.6	40
69.3	46	21.2	41.5
66.4	45	6.5	50
64.3	44	0	54
60	42.5		
E ₁ : 92% 32° E ₂ 36% 28°			
(1+4)	47.5°		

Methyl oxalate (C₄H₆O₄) + Pyrocatechol (C₆H₆O₂)

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	103.5	54	49
93.8	92	48.8	50
93.2	99	43.4	39
76.1	85	33.6	34
68.4	78	25.2	40.5
61.6	67	12.2	48
56.5	60	0	54
E: 39% 30°			

Methyl oxalate (C₄H₆O₄) + Resorcinol (C₆H₆O₂)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	115	-	58.4	60	28
95.9	112	-	52.4	47	"
92.7	109	-	45	32	"
87.9	104.8	-	37.4	33	"
83.1	100	-	29.8	39	-
77.9	92.5	-	21.3	43	28
70.9	83	-	13.9	47	-
67.8	78	-	7.6	50	-
65.2	74	28	1.3	52	-
61.5	66	"	0	54	-

Methyl oxalate (C₄H₆O₄) + Hydroquinone (C₆H₆O₂)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	169	-	28.4	100	91
96	168	-	26.7	95	-
88	164	-	25	92.5	-
81.4	160	-	23.9	91	-
73.1	153	-	22.9	93	91.5
62.0	143	-	19.8	94	-
56.0	137.0	-	19.5	93.5	90.7
55.4	136	-	13.8	91.5	-
51.4	131.5	-	13.5	91.5	-
49.5	128.5	-	16.9	94	-
48.7	128	-	13.4	92	-
47.5	126	-	15	93.5	-
45	123	-	10.8	89	-
42.6	120	-	9.2	83.5	90.7
41.7	119.0	-	9.5	83	-
39.9	117.5	-	6.0	75	-
37.3	114	-	5.0	71	-
35.3	110	91	4.5	64	-
32.5	106	-	4.5	64	91.5
31.2	103	-	2.7	51	-
			0	54	-
(4+1)					

Methyl oxalate (C₄H₆O₄) + Pyrogallol (C₆H₆O₃)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.
100	130.5	-	45.2	65
88.5	119	-	41.7	56.5
80.2	111	-	34.5	41
73.6	104	35	28.9	40
66.5	95	"	19.7	45
59.4	89.0	-	11.0	49
52.2	78.0	35	5.2	52
50.9	73.5	-	1.9	53
46.3	65	-	0	54

Methyl oxalate (C₄H₆O₄) + Thymol (C₁₀H₁₄O)

Ampola and Rimatori, 1896

%	D f. t.	%	D f. t.
0.39	-0.11	8.51	-2.94
0.65	.30	10.39	3.64
1.33	.50	11.85	4.13
2.47	.88	13.85	4.88
3.85	1.38	15.62	5.52
5.24	.80	17.75	6.51
7.58	2.59	22.31	7.92

Methyl oxalate ($C_4H_6O_4$) + 1-Naphthol ($C_{10}H_8O$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	95	-	51.3	26	26
89.3	83	-	48.6	27	-
77.5	70	-	45.5	29.0	26
65.4	52	-	41	32	"
58.9	39.5	26	40.9	32	-
57.4	39	-	30.3	39	-
54.1	30	26	21.4	44	-
53.6	30	-	11.5	49	-
51.7	28	-	0.0	54	-

Methyl oxalate ($C_4H_6O_4$) + 2-Naphthol ($C_{10}H_8O$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	121	-	44.3	58.5	-
96.9	119	-	43.2	57.6	39
90.5	112.3	-	36.5	49	"
82.6	103.5	-	35.5	47	-
75.2	94	-	31.5	42	-
69	86.5	-	29.4	40	39
64.3	80	-	28.1	41.5	"
59.5	75	39	21.5	45.5	-
56.7	70	-	14.7	48	-
52.1	60	-	9.4	50.5	-
49.2	63	-	4.9	51.5	-
46	60	-	0	54	-

Methyl oxalate ($C_4H_6O_4$) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	44.5	51.6	30
84.8	39.0	50.3	31
78	33.5	32.9	40
70.6	30	20.5	46
63.2	26	8.59	51
57.8	28	0	54
52.1	35		

E : 63% 26°

Methyl oxalate ($C_4H_6O_4$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	95	-	45.4	24	24
93	90	-	38.1	32	-
85.7	83	-	28.5	40	-
74.1	71	24	16.9	47	24
63.5	54	-	9.2	50	-
56.4	42	24	0	54	-
49.5	32	24			

Methyl oxalate ($C_4H_6O_4$) + p-Nitrophenol
($C_6H_5O_3N$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	114.5	-	55.8	59	32
95.7	110.5	-	48.9	47	"
90	106	-	41.4	33.5	"
80.9	96.5	-	31	39.1	-
73.7	88.0	-	22	44.5	-
66.9	78.5	-	13.7	48	-
63.4	72.5	32	2.3	52	-
60	65.8	-	0	54	-

Methyl oxalate ($C_4H_6O_4$) + 1,2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	112.5	-	49.4	69	43
89.7	101	-	43.6	63	-
82	94	-	31.9	47	43
74.8	89	-	23.9	45.5	-
67.5	82	-	15.3	48	43
60.5	78	43	7.1	52	-
55.5	74	-	0	54	-
54.1	73	-			

Methyl oxalate ($C_4H_6O_4$) + Picric acid ($C_6H_3O_7N_3$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	121.5	-	49.7	51.5	-
95.2	115.5	-	47.7	47	38
85.6	102.5	-	43.9	38.5	-
79	94	-	38.1	40.5	38
73.2	86	-	32.2	42.8	-
68.3	80	38	27.18	44.8	-
64.5	74	-	20.9	47.0	-
60.1	69	38	13.3	49.5	-
56.7	64	-	4.1	52.5	-
51.8	55	38	0	54	-

Lecat, 1949

Ethyl oxalate ($C_6H_{10}O_4$) (b. t. = 185.65) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Phenol	(C_6H_6O)	182.2	42	189.6	-
o-Cresol	(C_7H_8O)	191.1	64	194.15	-
m-Cresol	(C_7H_8O)	202.2	91	202.3	+1.2
			97		
p-Cresol	(C_7H_8O)	201.7	95	201.9	-
p-Chlorophe- nol	(C_6H_5OCl)	219.75	88	221.5	-

Ethyl oxalate ($C_6H_{10}O_4$) + Phenol (C_6H_6O)

Paterno, 1896

%	D f. t.	%	D f. t.
0.49	-0.24	6.54	-3.74
1.33	0.57	9.18	5.65
2.82	1.51	11.78	7.94
4.68	2.56	14.82	10.64

Ethyl oxalate ($C_6H_{10}O_4$) + Resorcinol ($C_6H_6O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	114.5	50.1	49.5
95.1	108	45.3	30
89.3	104.3	43.6	19
82.8	99	40.8	6
76.2	92	39.1	2
69.4	85	38.8	-
63.4	75.5	35.9	-
56	64	0	-

Ethyl oxalate ($C_6H_{10}O_4$) + Hydroquinone ($C_6H_6O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	169	30	114
94.1	167	27.2	108.4
83.9	163	27.2	108
71.4	155	24.3	102
53.7	148	23	100
52.3	140	21.2	92
47.6	135	19	86
47	135	16.8	79
42.3	129	12.8	62
36.4	123	9.2	48
33.1	119	6.4	37
32.2	117	5.7	30
		3.2	21

Ethyl oxalate ($C_6H_{10}O_4$) + 2-Naphthol ($C_{10}H_8O$)

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
100	121.5	44.6	51
96.4	118	40.3	42.5
91	113	39.3	40
85.2	107	38.3	39.5
79.1	101	33.7	30
71.7	92	30	24
62.2	79	26.7	15
66.1	85	20.8	-
55.6	69.3	0	-
49.9	60		-

Isoamyl oxalate ($C_{12}H_{22}O_4$) + Resorcinol ($C_6H_6O_2$)				
Lecat, 1949				
%				

Lecat, 1949						(α)				
Ethylfumarate (C ₈ H ₁₂ O ₄) (b.t.=217.85) + Phenols.						6528 Å	5890 Å	5784 Å	5456 Å	
2 nd comp.			Az							
Name	Formula	b.t.	%	b.t.	Sat. t.					
p-Ethylphenol	(C ₈ H ₁₀ O)	218.8	48	223.0	-	69.13	+ 5.003	+ 5.353	+ 5.264	+ 3.802
						44.55	3.049	2.857	2.771	2.292
						31.63	2.708	2.474	2.338	1.801
						15.62	3.233	3.125	3.011	2.607
						5.42	4.268	4.429	4.430	4.199
						0	4.833	5.173	5.181	5.151
						(α)				
2 nd comp.			Az			4750 Å	4365 Å	4346 Å		
						69.13	+3.572	-	+0.034	
						44.55	-0.426	-4.714	-4.997	
						31.63	-1.336	-	-5.906	
						15.62	-0.066	-3.909	-4.324	
						5.42	+2.297	-0.469	-1.539	
						0	+3.390	-	+0.195	
Ethyl diacetyl tartrate (C ₁₂ H ₁₈ O ₆) + Phenol										
(C ₆ H ₆ O)										
Scheuer, 1910										
%	mol%	f.t.	%	mol%	f.t.					
100	100	40.0	38.95	66.31	-4.6					
96.94	98.99	39.3	37.91	65.32	-1.5					
93.60	97.83	38.25	36.62	64.06	+3.2					
88.47	96.13	36.1	35.15	62.58	7.8					
85.04	94.61	33.9	34.85	62.27	8.7					
80.81	92.85	31.1	31.91	59.11	15.8					
78.32	91.77	29.3	31.24	58.37	17.25					
76.03	90.73	27.4	27.28	53.64	25.8					
72.49	89.04	24.6	26.46	52.60	27.25					
69.98	88.17	23.0	24.61	50.18	31.2					
68.51	87.05	21.0	23.49	48.64	31.9					
66.48	85.95	18.6	19.51	42.78	39.55					
65.35	85.33	17.7	19.08	42.13	40.5					
60.61	82.60	11.1	15.30	35.79	45.95					
52.02	76.98	-3.6	15.13	35.48	46.2					
49.76	75.34	-8.8	11.11	27.82	51.0					
47.04	73.27	-16.6	7.37	19.70	55.7					
44.48	71.20	-24.15 E	5.12	14.26	58.6					
42.21	69.75	-17.4	2.07	6.12	62.7					
40.79	68.07	-11.0	0	0	67					
%	mol%	d		99.0°						
		67.3°	82.2°							
100	100	1.0330	1.0204	1.0046						
69.13	87.36	.0586	.0461	.0307						
45.55	71.25	.1054 ?	.0917 ?	.0749 ?						
31.63	58.80	.0866	.0720	.0562						
15.62	36.35	.1002	.0840	.0682						
5.42	15.02	.1091	.0929	.0929						
0	0	.1086	.0976	.0802						
%	mol%	η		99.0°						
		67.3°	82.2°							
100	100	1742	1168	799						
69.13	87.36	2017	1416	968						
45.55	71.25	3332	2228	1443						
31.63	58.80	5294	3093	2201						
15.62	36.35	6122	3480	2182						
5.42	15.02	7005	4065	2483						
0	0	8951	5504	3126						
Lecat, 1949										
Bornyl acetate (C ₁₂ H ₂₀ O ₂) (b.t.=227.6) + Phenols.										
2 nd comp.			Az							
Name	Formula	b.t.	%	b.t.						
o-Xylenol	(C ₈ H ₁₀ O)	226.8	37	229.8						
Thymol	(C ₁₀ H ₁₄ O)	232.9	61	235.5						
Carvacrol	(C ₁₀ H ₁₄ O)	237.85	75	238.8						
p-Chlorphenol	(C ₆ H ₅ OC1)	219.75	30	232.6						
Phenyl acetate (C ₈ H ₈ O ₂) (b.t.=195.7) + Phenols										
Lecat, 1949										
2 nd comp.			Az							
Name	Formula	b.t.	%	b.t.	Dt mix.					
Phenol	(C ₆ H ₆ O)	182.2	9	195.8	-					
o-Cresol	(C ₇ H ₈ O)	191.1	36	198.2	-					
m-Cresol	(C ₇ H ₈ O)	202.2	70	204.1	+3.0					
p-Cresol	(C ₇ H ₈ O)	201.7	68	203.5	-					
o-Chlorphenol	(C ₆ H ₅ OC1)	176.8	12	197.0						
			48	-	+6.2					
p-Chlorphenol	(C ₆ H ₅ OC1)	219.75	87	220.3	-					
o-Bromphenol	(C ₆ H ₅ OBr)	194.8	50	205.0	+5.8					

Ethyl phenyl acetate ($C_{10}H_{12}O_2$) (b.t.=228.75)
+ Phenols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
o-Xylenol	($C_8H_{10}O$)	226.8	42	230.8
Thymol	($C_{10}H_{14}O$)	232.9	62	239.95
Carvacrol	($C_{10}H_{14}O$)	237.85	80	238.3
p-Chlor-phenol	(C_6H_5OC1)	219.75	27	233.2

Benzyl formate ($C_8H_8O_2$) (b.t.=203.0) + Phenols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
m-Cresol	(C ₇ H ₈ O)	202.2	46	206.8	3.5 (50%)
p-Cresol	(C ₇ H ₈ O)	201.7	42	206.3	-
Guaiacol	(C ₇ H ₈ O ₂)	205.05	90	206.2	-
p-Chlor-phenol	(C ₆ H ₅ OC1)	219.75	75	221.5	-

Benzyl acetate ($C_9H_{10}O_2$) + m-Cresol (C_7H_8O)

Moore and Styan, 1956

mol %	Dv (cc/mole)	Q mix
80	-0.06	+225
60	-0.1	+270
50	-0.12	+266
40	-0.13	+250
20	-0.1	+170

Benzyl acetate ($C_9H_{10}O_2$) (b.t.=215.0) + Phenols

Lecat, 1949

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
m-Xylenol as.	($C_8H_{10}O$)	210.5	36	216.8
p-Ethyl-phenol	($C_8H_{10}O$)	218.8	60	221.0
Guethol	($C_8H_{10}O_2$)	216.5	70	217.5
p-Chlor-phenol	(C_6H_5OC1)	219.75	45	226.5

Methyl benzoate ($C_8H_8O_2$) (b.t.=199.4)
+ Phenols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix. or Sat. t.
o-Cresol	(C ₇ H ₈ O)	191.1	21	200.35	-
m-Cresol	(C ₇ H ₈ O)	202.2	63 77	204.65	- +1.9
p-Cresol	(C ₇ H ₈ O)	201.7	42	206.3	-
p-Chlor-phenol	(C ₆ H ₅ OC1)	219.75	79	220.75	17.5
o-Brom-phenol	(C ₆ H ₅ OBr)	194.8	42	206.2	-

Ethyl benzoate ($C_9H_{10}O_2$) (b.t.=212.5)
+ Phenols

Lecat, 1949

2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix.
m-Cresol	(C ₇ H ₈ O)	202.2	9	212.6	-
p-Cresol	(C ₇ H ₈ O)	201.7	12 7	212.55	+1.3
m-Xylenol as.	(C ₈ H ₁₀ O)	210.5	32	214.5	-
p-Ethyl-phenol	(C ₈ H ₁₀ O)	218.8	80	219.8	-
o-Brom-phenol	(C ₆ H ₅ OBr)	194.8	15	214.2	-
p-Chlor-phenol	(C ₆ H ₅ OCl)	219.75	60	225.0	-

Propyl benzoate ($C_{10}H_{12}O_2$) (b.t.=230.85)
+ Phenols

Lecat, 1949

2 nd comp.			Az	
Name	Formula	b. t.	%	b. t.
o-Xylenol ($C_8H_{10}O$)		226.8	33	231.9
Thymol ($C_{10}H_{14}O$)		232.9	55	235.6
p-Chlor-phenol (C_6H_5OCl)		219.75	25	234.5

Isobutyl benzoate ($C_{11}H_{14}O_2$) (b.t.=232.9)
+ Phenols

Lecat, 1949

2 nd comp.			Az	
Name	Formula	b. t.	%	b. t.
Thymol ($C_{10}H_{14}O$)		232.9	17	242.35
Carvacrol ($C_{10}H_{14}O$)		237.85	43	243.85
Methyl-resorcinol ($C_7H_8O_2$)		243.8	69	244.5
p-Chlor-phenol (C_6H_5OCl)		219.75	7	242.5

Ethyl cinnamate ($C_{11}H_{12}O_2$) + Resorcinol
($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	272.0
88	281.6 Az
100	281.4

Methyl phthalate ($C_{10}H_{10}O_4$) (b.t.=283.2)
+ Phenols

Lecat, 1949

2 nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Resorcinol ($C_6H_6O_2$)		281.4	32	286.5
1-Naphthol ($C_{10}H_8O$)		288.0	78	290.5
2-Naphthol ($C_{10}H_8O$)		295.0	82	296.0

Guaiacol carbonate ($C_{15}H_{14}O_5$) + Vanilline
($C_8H_8O_3$)

Lehmann, 1914

%	f. t.	%	f. t.
100	81.8	90	79.0
99	81.0	85	79.5
98	80.9	80	78.0
97	80.7	75	78.0
96	80.5	70	77.2
95	80.2	65	74.0
94	80.0	60	72.8
93	79.5	55	71.0
92	79.3	50	70.6
91	79.2	0	-

Sulfonal ($C_7H_6O_4S_2$) + Salol ($C_{13}H_{10}O_3$)

Bianchini, 1914

mol%	f. t.	E	min.
100	42.5	-	-
95	39	34	90
90	38	-	100
80	70.5	-	90
70	89	-	80
60	97	-	"
50	105	-	70
40	109	-	60
30	112	-	"
20	118.5	-	50
10	123	34	30
0	124.5	-	-

Acetic anhydride ($C_4H_6O_3$) + Acetic acid ($C_2H_4O_2$)
Cherbov, 1930

L	%	V	p	P ₂	P ₁
80°					
0	0	96.4	-	96.4	
16.8	38.5	121.0	47.8	73.2	
38.9	61.2	149.4	93.8	56.0	
58.4	78.4	169.2	133.1	36.2	
78.4	90.5	190.7	172.6	18.1	
100	100	208.0	208.0	-	
60°					
0	0	37.5	-	37.5	
16.8	36.1	49.6	18.7	31.0	
38.9	54.6	61.4	33.6	27.9	
58.4	77.5	70.7	54.3	16.4	
78.4	85.5	81.6	69.9	11.2	
100	100	89.0	89.0	-	

Othmer, 1932

L	%	V	L	%	V
b.t. (750 mm)					
10	23.2		60	78.6	
20	42.3		70	84.1	
30	56.5		80	89.7	
40	65.2		90	95.0	
50	72.4				

Povarnin and Markov, 1924

Equilibrium L - V

$$x(100-y)/y(100-x)=0.419$$

$$b.t.=118^\circ+22.7^\circ \cdot y$$

$$x, y = \text{anhydride \% in V and L}$$

Marek, 1955-1956

b.t.	mol%	b.t.	mol%
L	V	L	V
400 mm			
117.8	5.9	12.9	106.6
113.4	20.5	37.6	103.8
111.2	31.0	49.5	102.8
109.2	40.0	58.1	101.6
108.1	44.9	63.4	100.0
		53.2	70.2
		67.4	81.4
		73.4	84.9
		81.6	89.7
		91.9	95.9

Drucker and Kassel, 1911

%	d	η	d	η
76.5°				
0	1.0096	462	1.0850	979
10.05	.0058	464	.0816	1006
30.05	.0021	483	.0753	1057
50.03	0.9961	498	.0689	1134
69.93	.9914	522	.0631	1185
90.03	.9860	555	.0570	1318
100	.9853	563	.0550	1333

Pickering, 1893

%	f.t.	%	f.t.
100	+16.63	43.008	-8.55
93.499	16.06	41.001	9.80
97.535	15.54	38.595	11.07
95.570	14.94	36.069	12.78
94.188	14.46	34.491	13.95
92.542	13.86	32.957	16.48
89.807	12.94	30.387	17.71
86.187	11.60	27.606	19.77
82.551	10.23	25.940	22.32
79.179	8.91	23.607	25.77
75.934	7.65	22.000	27.47
72.919	6.49	20.719	28.67
70.151	5.27	18.950	32.17
67.203	4.01	17.863	33.77
64.521	2.87	16.787	35.85
62.064	1.87	15.835	37.87
59.493	0.53	14.933	39.67
57.440	-0.43	13.387	43.47
54.763	1.70	11.784	46.97
52.052	3.30	10.120	50.57
49.228	4.80	8.394	56.37
47.330	5.88	7.505	61.87
45.048	7.19	6.599	-65.97

Atsuki and Ishii, 1931

%	f.t.	%	f.t.
100	16.18	91.53	12.90
98.70	15.69	86.99	11.36
97.52	15.27	82.08	10.15
94.64	14.14	76.80	7.68

Timmermans, 1957.

%	f.t.	E
0	- 72.5	-
8.8	- 20.8	- 74.35
35.8	- 5.7	-
47.8	- 3.5	-
63.6	+ 4.85	-
100	+ 16	-

Greathouse, Janssen and Haydel, 1956

vol%	Dt mix		
	0.156g H ₂ O	0.472g H ₂ O	0.582g H ₂ O
	per 100cc acid		
10.0	-1.25	-1.30	-1.25
25.0	1.95	2.05	2.05
50.0	2.40	2.35	2.30
75.0	1.60	1.70	1.60
85.0	1.10	1.10	1.05
90.0	0.80	0.90	0.75
95.0	0.45	0.50	0.30
96.5	-	0.40	0.25
97.5	0.20	-	-
98.0	-	-	0.15
98.5	-	0.10	-
99.0	0.10	-	-

Benzoic anhydride ($C_{14}H_{10}O_5$) + Acetic acid Beckmann, 1888 ($C_2H_4O_2$)						Methyl formate ($C_2H_4O_2$) + Butyric acid ($C_4H_8O_2$) Kononov, 1907			
%		D f. t.				mol%		p	
						18.1°			
98.66		-0.240				0		442.3	
96.25		0.670				25.31		363.3	
90.33		1.630				33.62		337.2	
82.92		2.755							
73.93		4.070							
Phthalic anhydride ($C_8H_4O_3$) + Phthalic acid Debeau, 1946 ($C_8H_6O_4$)						Methyl formate ($C_2H_4O_2$) + Isobutyric acid Kononov, 1907 ($C_4H_8O_2$)			
%		f. t.				mol%		p	
						18.1°			
0		130.95				0		442.3	
1.65		129.80 E				25.32		364.4	
						32.52		344.4	
Phthalic anhydride ($C_8H_4O_3$) + Trichloroacetic acid ($C_2HO_2Cl_3$) Pushin and Rikovski, 1940-46						Methyl formate ($C_2H_4O_2$) + Chloroacetic acid Kononov, 1907 ($C_2H_3O_2Cl$)			
mol%		f. t.		E		%		p	
						18.1°			
100		57		-		0		442.3	
90		51.5		36.5		25.50		326.3	
80		44		42		34.24		280.9	
70		58		42		50.88		193.2	
60		74.5		41					
50		88		40.5					
Acetyl chloride (C_2H_3OCl) + Acetic acid ($C_2H_4O_2$) Usanovich and Vasilyeva, 1946 (fig.)						Methyl formate ($C_2H_4O_2$) + Dichloroacetic acid Kononov, 1907 ($C_2H_2O_2Cl_2$)			
mol%		η		mol%		mol%		p	
						18.1°			
0		387		60		0		442.3	
10		440		70		25.98		290.9	
20		520		80		33.43		236.6	
30		550		90					
40		570		100					
50		600							
The author gives also an erroneous curve for 35°						Methyl formate ($C_2H_4O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$) Kononov, 1907			
Oleyl chloride ($C_{18}H_{33}OCl$) + Oleic acid ($C_{18}H_{34}O_2$) Taufel and Künkele, 1935 (fig.)						mol%			
						p			
						18.1°			
%		b. t.		%		0		442.3	
						25.14		290.4	
0		205		93		32.48		232.1	
10		221		95		49.39		102.4	
20		233		100		63.55		40.1	
30		238							
40		241 Az							

Ethyl formate ($C_3H_6O_2$) + Formic acid (CH_2O_2)

Udovenko and Airapetova, 1947

mol%	d		
	0°	25°	50°
100.00	1.2375	1.2088	1.1846
91.02	1.1859	1.1605	1.1329
83.55	1.1469	1.1243	1.0933
72.81	1.1071	1.0784	1.0498
64.44	1.0773	1.0506	1.0245
49.14	1.0330	1.0101	0.9825
36.68	1.0134	0.9872	0.9552
25.61	0.9833	0.9591	0.9285
14.93	0.9676	0.9413	0.9118
8.72	0.9592	0.9298	0.8967
0.00	0.9474	0.9168	0.8818

mol%	η		
	0°	25°	50°
100.00	2821.0	1537.2	976.7
91.02	2102.3	1230.7	818.2
83.55	1723.6	1056.1	724.9
72.81	1341.7	869.2	609.1
64.44	1143.2	764.0	555.0
49.14	900.8	624.4	471.1
36.68	783.2	559.4	434.2
25.61	663.5	494.0	376.5
14.93	593.5	444.9	345.5
8.72	547.4	417.0	315.9
0.00	528.8	397.2	308.0

Ethyl formate ($C_3H_6O_2$) + Acetic acid ($C_2H_4O_2$)

Abegg, 1894

N of formate f.t.	N of formate f.t.		
0	16.52	1.200	11.84
0.229	15.644	1.941	8.78
0.529	14.499	2.600	5.85
0.814	13.394	3.294	4.74
1.162	12.017		

Usanovich, Bilyalov and Krasnomolova, 1956

%	d		
	25°	40°	60°
0.00	1.0442	1.0279	1.0074
12.15	.0267	.0095	0.9893
23.98	.0080	0.9913	.9708
34.61	.9939	.9773	.9550
45.49	.9785	.9617	.9415
55.03	.9649	.9491	.9269
64.72	.9525	.9356	.9131
73.89	.9384	.9226	.8974
83.16	.9251	.9095	-
91.25	.9166	.8984	-
95.93	.9004	.8924	-
100.00	.9040	.8842	-

%	η		
	25°	40°	60°
0.00	1118	905	694
12.15	975	795	624
23.98	846	695	554
34.61	755	627	507
45.49	664	554	461
55.03	608	512	424
64.72	550	432	365
73.89	505	432	365
83.16	459	391	-
91.25	424	362	-
95.93	395	340	-
100.00	378	322	-

Amyl formate ($C_5H_{12}O_2$) + Acetic acid ($C_2H_4O_2$)

Abegg, 1894

molarity of amyl formate	f.t.
0	16.52
0.737	13.725
1.420	10.905
1.980	8.375
2.456	6.05
2.834	4.05

Ethyl formate ($C_3H_6O_2$) + Dichloroacetic acid ($C_2H_3Cl_2O_2$)

Konovalov, 1907

mol%	p
	18.1°
0	183.0
37.30	101.3
46.83	61.2
65.98	23.5

Methyl acetate ($C_3H_6O_2$) + Acetic acid ($C_2H_4O_2$)

Abegg, 1894

molarity of methyl acetate	f.t.
0	16.52
0.798	13.56
1.677	10.05
2.485	6.32
3.235	2.72

Methyl acetate ($C_3H_6O_2$) + Butyric acid ($C_4H_8O_2$)

Weissenberger, Henke and Katschinka, 1926

mol%	p	mol%	p
20°			
75	32.0	40	107.7
60	77.8	25	123.2
50	78.5	0	169.8

Methyl acetate ($C_3H_6O_2$) + Chloracetic acid
($C_2H_3O_2Cl$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	mol%	p
20°			
0	169.8	30	98.8
10	148.1	40	73.1
20	124.3	50	54.0

Methyl acetate ($C_3H_6O_2$) + Dichloracetic acid
($C_2H_2O_2Cl_2$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	Q mix	mol%	p	Q mix
20°					
0	169.8	-	50	29.5	871
10	141.0	375	60	16.1	844
20	109.4	588	70	7.6	752
30	78.6	750	80	3.0	588
40	50.0	842			

Methyl acetate ($C_3H_6O_2$) + Trichloracetic acid
($C_2HO_2Cl_3$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	mol%	p
20°			
0	169.8	30	79.2
10	143.8	40	43.5
20	112.0	50	20.7

Ethyl acetate ($C_4H_8O_2$) + Acetic acid ($C_2H_4O_2$)

Schmidt, 1930

%				
L	V	p	p ₂	p ₁
59.6°				
0	0	415.3	-	415.3
4.1	0.74	401.2	2.20	399.0
6.8	1.47	390.4	3.32	387.1
20.4	4.24	334.5	14.26	320.2
41.12	13.40	265.0	31.96	233.0
41.12	13.32	265.0	32.13	232.9
50.70	19.49	234.0	40.92	193.1
51.28	19.87	233.0	41.03	192.0
53.45	21.30	225.0	42.19	182.8
68.05	35.73	176.9	57.68	119.2
68.05	35.65	176.9	57.51	119.4
84.68	60.78	127.7	70.99	56.7
42°				
0	0	203.8	-	203.8
4.91	0.92	194.1	1.21	192.9
6.80	1.46	188.1	3.16	184.9
20.04	3.55	164.2	4.84	159.2
33.08	7.52	142.0	9.4	132.6
59.51	23.51	95.8	19.1	76.7
77.75	43.05	68.5	26.01	42.5
77.75	43.21	68.5	25.91	42.6
100.00	100.00	38.5	38.5	-

Usanovich, Bilyalov and Krasnomolova, 1955

t	p	t	p	t	p
100 mol%		78.6 mol%		71 mol%	
41.2	37	42.0	81	47.0	137
44.5	45	46.5	100	50.0	159
60.0	93	51.2	124	53.5	178
64.1	110	56.5	155	56.5	203
74.5	171	60	181	60	229
83.5	249	63.5	198	62	251
50.8 mol%		33.0 mol%		11.0 mol%	
52.5	238	40.7	165	46.0	251
58.0	298	45.0	199	50.0	297
60.0	321	50.0	241	52.6	321
62.5	354	54.0	282	56.2	374
67.5	427	57.0	319	60.0	419
71.0	481	60	360	63.7	475
0 mol%					
45.5	250	53.0	387	60.0	444
48.5	282	58.0	411	63.5	499

Bushmakina and Lutugina, 1956

mol%		mol%	
L	V	L	V
760 mm			
2.5	6.4	79.9	93.6
14.9	31.9	86.6	96.2
34.4	59.5	93.9	98.5
62.3	84.5	95.5	98.9

Abegg, 1894

molarity of ethyl acetate f.t.

0	16.52
0.876	13.21
1.574	10.27
2.278	7.20
2.865	4.13

Kendall and Brakeley, 1921

mol% d mol% d

25°

0	0.8948	59.96	0.9697
10.49	.9092	69.88	.9850
20.70	.9211	80.11	1.0015
30.37	.9308	87.42	.0165
39.90	.9417	100	.0499
49.85	.9557		

Hammick and Andrew, 1929

mol% d mol% d

25°

100	1.0510	45.71	0.9471
87.27	.0200	31.10	.9288
69.69	.9844	0	.8938

Usanovich, Bilyalov and Krasnomolova, 1955

wt% mol% d
25° 40° 60°

100	100	1.0442	1.0279	1.0074
79.65	72.73	.0210	1.0045	0.9831
69.63	60.97	0.9994	0.9823	.9603
58.99	49.50	.9825	.9642	.9436
50.21	40.72	.9644	.9471	.9247
39.94	31.19	.9512	.9354	.9124
30.38	22.98	.9379	.9197	.8933
		.9266	.9086	.8862
20.29	14.77	.9141	.8961	.8731
9.52	6.69	.9029	.8849	.8613
0	0	.8914	.8741	.8505

wt% mol% η
25° 40° 60°

100	100	1118	905	694
89.80	85.81	970	791	618
79.65	72.73	867	707	557
69.63	60.97	771	634	503
58.99	49.50	697	579	461
50.21	40.72	644	538	430
39.94	31.19	582	488	393
30.38	22.98	543	454	369
20.29	14.77	499	419	342
9.52	6.69	460	388	316
0	0	424	360	295

Kendall and Brakeley, 1921

mol% η mol% η

25°

0	423.6	59.96	689.0
10.49	459.0	69.88	766.8
20.70	494.9	80.11	859.0
30.37	533.1	87.42	943.0
39.90	576.2	100	1121
49.85	628.9		

Hammick and Andrew, 1929

mol% σ mol% σ

25°

100	28.52	45.71	25.21
87.27	27.49	31.10	25.65
69.69	26.56	0	23.42

Kendall and Gross, 1921

mol% $\kappa \cdot 10^7$ mol% $\kappa \cdot 10^7$

25°

100	0.24	23.52	0.05
77.87	0.20	0	below 0.01
49.27	0.12		

Longtin, 1942 (fig.)

mol% Q mix mol% Q mix

23°

0	0	60	+8.93
10	-2.38	70	+11.90
20	-2.38	80	+13.09
30	0	90	+9.52
40	+3.57	100	0
50	+5.05		

Timofeev, 1905

% Q dil
initial final (by mole acetate)

100	93.3	+107
93.3	86.9	+68
86.9	81.8	+50

Ethyl acetate ($C_4H_8O_2$) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr and Ralston, 1944

%	f. t.
61.6	0
85.9	10
100	16.30

Ethyl acetate ($C_4H_8O_2$) + Pelargonic acid
($C_9H_{18}O_2$)

Hoerr and Ralston, 1944

%	f. t.
71.4	0
87.0	10.0
100	12.25

Ethyl acetate ($C_4H_8O_2$) + Caprinic acid
($C_{10}H_{20}O_2$)

Hoerr and Ralston, 1944

%	f. t.
25.2	0.0
47.3	10.0
74.2	20.0
98.7	30.0
100	31.24

Ethyl acetate ($C_4H_8O_2$) + Undecanoic acid
($C_{11}H_{22}O_2$)

Hoerr and Ralston, 1944

%	f. t.
27.8	0.0
53.2	10.0
80.9	20.0
100	28.13

Ethyl acetate ($C_4H_8O_2$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
8.5	0.0	71.4	30.0
15.5	10.0	92.6	40.0
34.2	20.0	100	43.92

Ethyl acetate ($C_4H_8O_2$) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
9.1	0.0	73.7	30.0
18.3	10.0	98.7	40.0
41.1	20.0	100	41.76

Ethyl acetate ($C_4H_8O_2$) + Myristic acid
($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
3.2	0.0	62.0	40.0
6.1	10.0	93.1	50.0
13.3	20.0	100	54.15
30.8	30.0		

Ethyl acetate ($C_4H_8O_2$) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
2.7	0.0	67.5	40.0
5.7	10.0	95.5	50.0
13.3	20.0	100	52.54
33.7	30.0		

Ethyl acetate ($C_4H_8O_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.8	0.0	34.6	40.0
2.1	10.0	66.9	50.0
5.7	20.0	95.9	60.0
14.9	30.0	100.0	62.82

Ethyl acetate ($C_4H_8O_2$) + Margaric acid
($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.4	0.0	37.1	40
1.6	10.0	70.6	50
4.9	20.0	98.3	60
14.2	30.0	100	69.64

Ethyl acetate ($C_4H_8O_2$) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.5	20.0	43.8	50.0
4.8	30.0	77.6	60.0
17.6	40.0	100	69.32

Ethyl acetate ($C_4H_8O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
1.5	-40	30.5	-10
4.2	-30	64.9	0
10.8	-20	88.2	+10

Ethyl acetate ($C_4H_8O_2$) + Linoleic acid
($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

%	f. t.
5.2	-50
12.7	-40
36.7	-30
66.6	-20
92.9	-10

Ethyl acetate ($C_4H_8O_2$) + Chloracetic acid
($C_2H_3O_2Cl$)

Weissenberger, Schuster and Pamer, 1925

mol%	p
20°	
0	72.8
10	62.9
20	52.0
30	44.0
40	35.0
50	26.0

Ethyl acetate ($C_4H_8O_2$) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	Q mix	mol%	p	Q mix
20°					
0	72.8	-	40	23.5	900
10	61.0	365	50	13.0	961
20	49.0	530	60	6.8	905
30	36.0	734	70	3.1	765
			100	1	590

Ethyl acetate ($C_4H_8O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Weissenberger, Schuster and Pamer, 1925

mol%	p	mol%	p
20°			
0	72.8	30	33.3
10	62.0	40	19.0
20	49.0	50.0	9.5

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
100	-83.0	45.3	-20.9
95.5	-88.0	40.1	-18.3
87.1	-70.5	32.7	+10.7
78.9	-53.0	24.6	30.4
70.5	-42.0	17.6	42.8
59.9	-32.5	8.5	52.3
50.0	-27.5(1+1)	0	58.8
47.8	-28.1		

Kendall and Brakeley, 1921

mol%	d	mol%	d
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25°

0	0.8948	48.78	1.295
11.18	0.9972	61.42	1.386
18.40	1.045	70.08	1.454
28.07	1.123	100	1.62
38.46	1.202		

mol%	η	mol%	η
------	--------	------	--------

0	423.6	48.78	2176
11.18	587.8	61.42	3467
18.40	730.9	70.08	4709
28.07	1001	100	6830
38.46	1449		

Kendall and Gross, 1921

mol%	$\kappa \cdot 10^7$	mol%	$\kappa \cdot 10^7$	
25°		25°		60°

0	below 0.01	48.05	9.67	-
4.93	1.10	51.52	9.19	-
9.80	2.59	54.52	8.74	-
14.36	4.36	57.22	8.11	-
19.55	5.94	59.07	7.68	-
23.56	7.32	63.16	6.82	-
27.31	8.37	72.63	3.93	7.02
30.07	9.12	79.12	-	4.01
33.06	9.62	86.40	-	1.91
36.67	9.95	94.66	-	0.37
42.05	10.05	100	-	0.06

Ethyl acetate ($C_4H_8O_2$) + Benzoic acid ($C_7H_6O_2$)

Beckmann, 1890

%	D b. t.	%	D b. t.
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		5.46	+1.140
0.78	+0.170	10.03	2.088
2.65	0.543	15.65	3.368

Beckmann, Fuchs and Gernhardt, 1895

%	D b. t.	%	D b. t.
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725.5 mm

2.48	+0.575	10.53	+2.400
4.85	1.110	11.90	2.725
6.59	1.500	12.85	2.940
7.24	1.650	13.45	3.090
9.30	2.120		

Ethyl acetate ($C_4H_8O_2$) + Salicylic acid ($C_7H_6O_3$)

Timofeev, 1905

%		Q dil.
initial	final	(by mole acid)

0	0.54	-1.21
0.54	5.8	-1.80
5.8	10.5	-2.32
10.5	14.8	-2.71
14.8	18.6	-2.98

Ethyl acetate ($C_4H_8O_2$) + m-Nitrobenzoic acid ($C_7H_5NO_4$)

Timofeev, 1905

%		Q dil.
initial	final	(by mole acid)

0	3.93	-2.77
3.93	7.6	-2.95
7.6	10.8	-2.97
10.8	13.3	-3.16

Propyl acetate ($C_5H_{10}O_2$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol%		mol%	
L	V	L	V
at the b. t.			
100	100	50	40.4
95	92.4	40	32.5
90	84.9	30	24.5
80	70.7	20	16.2
70	58.7	10	8.2
60	49	0	0

Abegg, 1894

molarity of acetate	f. t.
---------------------	-------

0	16.52
0.769	13.53
1.54	10.19
2.196	6.965
2.723	4.15
2.972	2.85

Butyl acetate ($C_4H_8O_2$) + Acetic acid ($C_2H_4O_2$)

Othmer, 1943

mol%		mol%	
L	V	L	V
at the b. t.			
0	0	50	57.8
5	6.8	60	66.3
10	13.4	70	75.0
20	25.7	80	84.1
30	37.6	90	92.5
40	48.0	100	100.0

Bushmakina and Lutugina, 1956

mol%		mol%	
L	V	L	V
760 mm			
5.00	6.13	77.30	81.28
11.66	14.18	89.5	91.2
13.13	15.96	90.9	92.6
21.45	25.80	93.6	94.5
38.37	44.38	93.8	94.7
49.25	55.29	96.1	96.7
59.55	65.20	96.2	96.7
70.90	76.50		

Usanovich, Bilyalov and Krasnomolova, 1955

t	p	t	p	t	p
100 mol%		90.1 mol%		80.1 mol%	
41.2	37	40.0	33	48.5	48
44.5	45	58.5	89	53.2	61
60.0	93	60.0	88	56.0	68
64.1	110	61.5	101	60.0	84
74.5	171	66.5	118	69.0	131
83.5	249	72.5	158	75.0	162
60 mol%		40.0 mol%		27.1 mol%	
55.2	64	39.0	28	37.5	28
60.0	81	47.2	43	47.5	44
63.0	94	54.5	61	54.0	60
67.0	110	60.0	79	60.0	77
72.5	134	65.5	95	65.5	94
				70.5	116
15.0 mol%		0 mol%			
43.0	39	43.0	38		
48.5	51	48.5	45		
54.0	67	55.0	60		
60.0	76	60.0	74		
65.0	95	65.0	93		
		70.0	114		

wt%	mol%	d	25°	40°	60°
100	100	1.0442	1.0279	1.0074	
89.75	81.92	.0062	0.9914	0.9711	
79.65	66.94	0.9784	.9611	.9425	
70.11	54.82	.9559	.9437	.9202	
60.02	43.71	.9352	.9232	.9021	
50.93	34.93	.9247	.9090	.8898	
35.51	22.17	.9063	.8923	.8732	
19.85	11.36	.8905	.8754	.8581	
12.95	7.14	.8884	.8709	.8507	
11.14	6.09	.8830	.8693	.8497	
9.04	4.89	.8825	.8669	.8477	
6.85	3.67	.8808	.8710	.8473	
5.73	3.05	.8813	.8684	.8458	
3.95	2.36	.8776	.8624	.8435	
2.21	1.15	.8760	.8627	.8432	
0	0	.8739	.8584	.8396	

wt%	mol%	η	25°	40°	60°
100	100	1118	905	694	
89.75	81.92	1003	811	634	
79.65	66.94	947	767	595	
70.11	54.82	887	724	568	
60.02	43.71	842	685	543	
50.93	34.93	811	671	527	
35.51	22.17	770	630	499	
19.85	11.36	729	599	478	
12.95	7.14	716	589	467	
11.14	6.09	723	592	467	
9.04	4.89	712	583	460	
6.85	3.67	698	580	457	
5.73	3.05	698	580	457	
3.95	2.36	696	574	457	
2.21	1.15	686	663	450	
0	0	669	555	443	

Butyl acetate ($C_4H_8O_2$) + Caprylic acid
($C_8H_{16}O_2$)

Hoerr and Ralston, 1944

%	f. t.
67.3	0.0
87.5	10.0
100	16.30

Butyl acetate ($C_4H_8O_2$) + Pelargonic acid
($C_9H_{18}O_2$)

Hoerr and Ralston, 1944

%	f. t.
75.9	0.0
95.4	10.0
100	12.25

Butyl acetate ($C_6H_{12}O_2$) + Capric acid
($C_{10}H_{20}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
30.8	0.0	98.8	30.0
52.5	10.0	100	31.24
76.7	20.0		

Butyl acetate ($C_6H_{12}O_2$) + Undecanoic acid
($C_{11}H_{22}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
35.4	0.0		
59.1	10.0		
83.7	20.0		
100	28.13		

Butyl acetate ($C_6H_{12}O_2$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
11.5	0.0	67.9	30.0
21.0	10.0	93.1	40.0
40.4	20.0	100	43.92

Butyl acetate ($C_6H_{12}O_2$) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
12.5	0.0	76.2	30.0
24.8	10.0	98.9	40.0
48.7	20.0	100	41.76

Butyl acetate ($C_6H_{12}O_2$) + Myristic acid
($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
4.5	0.0	67.4	40.0
8.9	10.0	93.1	50.0
17.7	20.0	100	54.15
37.9	30.0		

Butyl acetate ($C_6H_{12}O_2$) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
4.2	0	71.6	40.0
8.8	10.0	96.0	50.0
18.2	20.0	100	52.54
39.8	30.0		

Butyl acetate ($C_6H_{12}O_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.4	0.0	40.8	40.0
3.6	10.0	69.2	50.0
8.1	20.0	95.8	60.0
18.9	30.0	100	62.82

Butyl acetate ($C_6H_{12}O_2$) + Margaric acid
($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.2	0.0	42.8	40.0
3.3	10.0	72.8	50.0
8.0	20.0	98.3	60.0
19.3	30.0	100	60.94

Butyl acetate (C ₆ H ₁₂ O ₂) + Stearic acid(C ₁₈ H ₃₆ O ₂)			
Hoerr and Ralston, 1944			
%	f. t.	%	f. t.
0.1	0.0	22.2	40
0.2	10.0	49.2	50
1.6	20.0	77.7	60
7.5	30.0	100	69.32

Butyl acetate (C ₆ H ₁₂ O ₂) + Oleic acid(C ₁₈ H ₃₄ O ₂)			
Hoerr and Harwood, 1952			
%	f. t.	%	f. t.
2.7	-40	32.4	0
5.9	-30	66.6	10
12.8	-20	88.5	20

Amyl acetate (C ₇ H ₁₄ O ₂) + Acetic acid (C ₂ H ₄ O ₂)			
Abegg, 1894			
molarity of acetate	f. t.		
0	16.52		
0.531	14.37		
0.815	13.34		
1.36	10.97		
1.855	8.56		
2.267	6.28		
2.622	4.24		

Usanovich, Bilyalov and Krasnomolova, 1955					
t	p	t	p	t	p
100 mol%		80.1 mol%		60.0 mol%	
41.2	37	39.5	31	41.5	29
44.5	45	46.0	45	45.5	37
60.0	93	50.7	55	50.7	43
64.1	110	55.7	69	56.0	56
74.5	171	60.0	82	60.0	71
83.5	249	64.5	98	66.0	94
38.3 mol%		19.2 mol%		0 mol%	
43.0	28	42.0	22	45.0	28
49.5	39	47.5	35	51	36
55.0	56	56.5	53	56.0	45
60.0	62	60.0	56	60.0	49
64.5	81	63.7	59	63.0	56

wt%	mol%	d		
		25°	40°	60°
100	100	1.0442	1.0279	1.0074
90.55	81.55	1.0043	0.9868	0.9649
79.82	64.59	.9740	.9560	.9340
69.65	51.42	.9497	.9332	.9090
59.52	40.41	.9278	.9122	.8905
54.01	35.56	.9180	.9040	.8820
48.85	30.56	.9090	.8965	.8760
39.26	22.96	.8940	.8800	.8610
30.43	16.78	.8840	.8700	.8525
21.22	11.05	.8740	.8620	.8440
10.88	5.33	.8680	.8550	.8370
0	0	.8629	.8491	.8272

wt%	mol%	25°	40°	60°
100	100	1118	905	694
90.55	81.55	1055	853	669
79.82	64.59	1049	831	613
69.65	51.42	994	799	616
59.52	40.41	978	781	603
54.01	35.56	1002	797	609
48.85	30.56	1006	798	609
39.26	22.96	980	777	595
30.43	16.78	974	772	589
21.22	11.05	917	734	566
10.88	5.33	881	708	547
0	0	818	663	522

Isoamyl acetate (C ₇ H ₁₄ O ₂) + Acetic acid (C ₂ H ₄ O ₂)			
Othmer, 1943			
mol%		mol%	
L	V	L	V
at the b. t.			
0	0	50	65.8
5	7.7	60	74.4
10	15.9	70	81.7
20	30.9	80	88.2
30	43.5	90	94.2
40	55.2	100	100.0

Methyl-n-Amyl acetate (C ₈ H ₁₆ O ₂) + Acetic acid (C ₂ H ₄ O ₂)					
Othmer and Benenati, 1945					
mol%		b. t.	mol%		b. t.
L	V		L	V	
13.5	27.0	143.9	41.0	60.5	132.0
18.8	36.3	138.3	56.2	76.0	127.0
24.5	45.1	136.8	60.1	79.4	126.1
32.0	51.0	134.9	60.3	79.8	126.0
33.0	53.0	132.9	63.9	81.9	125.1
			87.1	94.3	120.4

mol%	n_D	mol%	n_D
18°			
0	1.4013	60	1.3936
10	.4007	70	.3880
20	.3998	80	.3837
30	.3981	90	.3785
40	.3960	100	.3724
50	.3937		

Methyl isoamyl acetate ($C_8H_{16}O_2$) + Acetic acid
($C_2H_4O_2$)

Othmer, 1943

mol%		mol%	
L	V	L	V
0	0 at the b. p.	50	71.3
5	14.1	60	78.4
10	24.5	70	84.9
20	41.0	80	90.4
30	53.7	90	95.4
40	63.3	100	100.0

Cetyl acetate ($C_{18}H_{36}O_2$) + Acetic acid ($C_2H_4O_2$)

Sumarokova and Bilyalov, 1955

mol%	wt%	d			
		40°	50°	60°	70°
100	100	1.0279	1.0162	1.0074	0.9958
90.66	67.09	0.9583	0.9487	0.9385	.9280
71.26	65.79	.9019	.8911	.8839	.8755
48.52	16.67	.8734	.8649	.8570	.8499
0	0	.8455	.8379	.8310	.8238

mol%	wt%	η			
		40°	50°	60°	70°
100	100	905	767	694	607
90.66	67.09	1460	1250	1090	956
71.26	65.79	2580	2130	1830	1590
48.52	16.67	3720	2990	2470	2120
31.45	7.66	4390	3500	2860	2370
0	0	5010	3850	3200	2670

Cyclohexyl acetate ($C_8H_{14}O_2$) + Acetic acid
($C_2H_4O_2$)

Othmer, 1943

mol%			mol%		
L	V	b. t.	L	V	b. t.
0	0	177.0	50	85.3	132.5
2	36.5	172.0	60	90.0	128.2
5	47.0	166.0	70	93.7	125.0
10	55.9	157.5	80	96.4	122.3
20	65.5	149.1	90	98.3	120.1
30	73.1	142.1	100	100.0	118.1
40	79.6	137.0			

Butoxyethyl acetate ($C_8H_{16}O_3$) + Acetic acid
($C_2H_4O_2$)

Othmer and Benenati, 1945

mol%			mol%		
L	V	b. t.	L	V	b. t.
9.6	44.1	174.5	53.3	91.2	140.1
17.9	61.9	165.0	61.9	92.5	134.9
27.3	73.0	158.0	69.5	95.0	130.9
30.0	75.5	154.9	75.0	96.8	128.1
46.6	87.2	145.0	79.0	97.2	126.1

mol%	n_D	mol%	n_D
18°			
0	1.4144	60	1.4007
10	.4129	70	.3965
20	.4114	80	.3908
30	.4095	90	.3830
40	.4070	100	.3724
50	.4040		

Ethyl butyrate ($C_6H_{12}O_2$) + Acetic acid ($C_2H_4O_2$)

Abegg, 1894

molarity of ethyl butyrate	f. t.
0	16.52
0.730	13.875
1.342	11.455
1.909	8.980
2.411	6.605
2.828	4.435

Amyl butyrate ($C_9H_{18}O_2$) + Acetic acid ($C_2H_4O_2$)

Usanovich, Bilyalov and Kransnomolova, 1955

wt%	mol%	d		
		25°	40°	60°
100	100	1.0442	1.0279	1.0074
89.87	77.10	0.9917	0.9745	0.9547
85.01	68.26	.9719	.9562	.9376
79.93	60.17	.9558	.9424	.9232
74.85	53.03	.9435	.9286	.9097
69.86	41.79	.9323	.9182	.8990
60.0	36.27	.9142	.9006	.8808
50.01	27.51	.8992	.8881	.8688
39.82	20.07	.8886	.8756	.8559
30.81	14.45	.8809	.8679	.8499
19.60	8.47	.8721	.8594	.8418
10.94	4.46	.8666	.8530	.8364
5.41	2.12	.8632	.8507	.8330
0	0	.8599	.8480	.8317

wt%	mol%	η		
		25°	40°	60°
100	100	1120	905	694
89.87	77.10	1060	853	662
85.01	68.26	1040	836	653
79.93	60.17	1020	824	644
74.85	53.03	1030	827	642
69.86	41.79	1030	833	645
60.0	36.27	1040	833	645
50.01	27.51	1050	846	656
39.82	20.07	1070	850	657
30.81	14.45	1080	859	663
19.60	8.47	1080	860	661
10.94	4.46	1080	861	667
5.41	2.12	1070	859	664
0	0	1070	860	664

Ethyl valerate ($C_7H_{14}O_2$) + Acetic acid ($C_2H_4O_2$)

Abegg, 1894

molarity of ethyl valerate	f. t.
0	16.52
0.635	14.17
1.172	12.05
1.644	9.99
1.982	8.42

Lecat, 1949

Esters + Chloracetic acid ($C_2H_3O_2Cl$) (b. t. = 189.05)

1 st comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Isoamyl isovalerate	($C_{10}H_{20}O_2$)	192.7	65	187.7	44
Ethyl heptanoate	($C_9H_{18}O_2$)	188.7	48	185.5	-
Methyl caprylate	($C_9H_{18}O_2$)	192.9	67	187.5	-

Methyl brassidate ($C_{23}H_{44}O_2$) + Brassidic acid ($C_{22}H_{42}O_2$)

Keffler and Maiden, 1936

mol%	f. t.	mol%	f. t.
100	59.80	3.8	32.60
69.1	55.65	2.5	30.10
50.7	52.65	1.6	30.05
31.1	48.50	0	30.10
30.6	40.40		

Ethyl brassidate ($C_{24}H_{46}O_2$) + Brassidic acid ($C_{22}H_{42}O_2$)

Keffler and Maiden, 1936

mol%	f. t.	mol%	f. t.
100	59.80	11.6	41.80
78	57.00	3.7	32.50
59.6	54.15	2.6	29.90
40.9	50.15	1.6	24.90
22.1	46.00	0	25.05

Glycol diacetate ($C_6H_{10}O_4$) + Valeric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.
0	186.3
38	185.6 Az
100	186.35

Methyl methacrylate ($C_5H_8O_2$) + Methacrylic acid
($C_4H_6O_2$)

Woods, 1947

mol % b.t.			mol % b.t.		
L	V		L	V	
0	0	61.5	6	0.45	64.0
0.2	0.02	61.6	8	0.7	64.4
0.5	0.08	61.9	10	0.8	65.0
1.0	0.15	62.0	15	1.8	65.0
2.0	0.25	62.3	20	2.1	67.0
3	0.5	63.5	25	3.0	68.0
4	0.35	63.7	30	4.0	69.4
5	0.5	63.8			

% d n _D			% d n _D		
20°					
0	0.9432	1.4140	6.0	0.9480	1.4158
0.2	.9436	.4142	8.0	.9496	.4162
0.5	.9438	.4144	10.0	.9513	.4165
1.0	.9442	.4146	15.0	.9548	.4172
2.0	.9450	.4149	20.0	.9588	.4181
3.0	.9458	.4152	25.0	.9623	.4188
4.0	.9465	.4155	30.0	.9651	.4196
5.0	.9473	.4157			

Meso-2,3-butyleneglycol diacetate ($C_8H_{14}O_4$)
+ Acetic acid ($C_2H_4O_2$)

Othmer, Shlechter and Koszalka, 1945

mol% L		t	mol% V		t	mol% V	
		760 mm			500 mm		
0		193.7	0		178.7	0	
5		185.5	30.1		171.3	29.3	
10		177.5	50.2		164.3	50.0	
20		162.1	75.2		150.5	75.0	
30		149.7	86.8		138.6	86.4	
40		141.0	92.2		130.0	92.0	
50		135.5	94.7		123.5	95.0	
60		131.3	96.5		118.0	94.4	
70		127.0	98.1		113.0	98.4	
80		123.2	99.2		108.7	99.2	
90		120.0	99.7		105.7	99.7	
95		118.6	99.8		104.7	99.8	
100		117.8	100.0		104.4	100	

		300			150
0		161.0	0		138.3
5		153.7	31.2		131.5
10		146.8	50.5		124.7
20		134.0	75.4		112.5
30		123.7	86.1		103.3
40		116.3	91.9		96.3
50		110.5	95.1		90.7
60		105.2	96.7		86.1
70		100.1	98.2		82.0
80		95.7	99.1		78.3
90		91.7	99.7		74.7
95		90.4	99.8		73.0
100		89.6	100		71.5

Tripalmitin ($C_{51}H_{98}O_6$) + Palmitic acid
($C_{16}H_{32}O_2$)

Kremann and Klein, 1913

%	f.t.	m.t.	%	f.t.	m.t.
100	61.0	-	40	53.4	-
95	60.6	38.9	30	57.7	54
90	60.3	42.3	20	58.8	54
80	59.0	46.2	10	60.3	54
70	57.9	51.2	5	60.1	-
60	56.0	53.2	0	61.9	-
50	54.0	54.0			

Tripalmitin ($C_{51}H_{98}O_6$) + Stearic acid
($C_{18}H_{36}O_2$)

Kremann and Klein, 1913

%	f.t.	m.t.	%	f.t.	m.t.
100	67.5	-	40	59.0	57.1
95	67.3	33.1	30	-	57.1
90	66.8	42.8	20	59.0	58.1
80	65.9	46.0	10	60.1	58.1
70	65.1	52.4	5	61.2	57.0
60	62.9	55.2	0	61.9	-
50	62.0	57.0			

Tristearin ($C_{57}H_{110}O_6$) + Palmitic acid
($C_{16}H_{32}O_2$)

Kremann and Kropsch, 1914

%	f.t.	E	%	f.t.	E
0	56	-	33.3	60.2	-
1	63.9	-	41.6	58.5	-
2	67.6	-	50	55.4	54.4
3.6	68.4	-	58.5	56.6	-
5	68.0	-	60	55.0	-
7.5	67.0	-	66.5	57.5	51.6
8	67.0	-	75	58.0	54.7
9.8	68.4	-	83.2	58.7	-
12.2	67.2	-	91.7	59.2	55.0
15.1	64.3	-	92.5	61.0	-
16.2	63.0	-	100	61.0	-
25	63.3	-			

Tristearin ($C_{57}H_{110}O_6$) + Stearic acid
($C_{18}H_{36}O_2$)

Kremann and Kropsch, 1914

%	f.t.	E	%	f.t.	E
100	67.5	-	25	57.0	-
85.7	66.7	-	20	56.0	51.5
62.5	63.0	52-50.8	12.5	-	52.0
50	61.7	-	6.3	55.1	-
50	59.6	53.6	0	56.0	-
37.5	58.0	53.7			

Isobutyl carbonate ($C_3H_8O_3$) + Chloracetic acid ($C_2H_3O_2Cl$)			
Lecat, 1949			
%	b. t.		
0	190.3		
40	192.5 Az		
100	189.05		
Isoamyl carbonate ($C_{11}H_{22}O_3$) + Caprylic acid ($C_8H_{16}O_2$)			
Lecat, 1949			
%	b. t.		
0	232.2		
10	233.8 Az		
100	238.5		
Methyl oxalate ($C_4H_6O_4$) + Acetic acid ($C_2H_4O_2$)			
Kendall and Booge, 1916			
mol%	f. t.	mol%	f. t.
0	53.2	61.9	30.5
9.6	50.3	65.3	28.2
19.5	47.5	71.5	23.8
29.3	44.5	81.2	14.1
39.2	41.3	90.1	10.6
48.6	37.3	100	16.4
58.2	32.5		
Lecat, 1949			
Methyl oxalate ($C_4H_6O_4$) (b. t.=164.0) + Acids.			
2 nd comp.		Az	
Name	Formula	b. t.	% b. t.
Butyric acid	($C_4H_8O_2$)	164.45	46 160.8
Isobutyric acid	($C_4H_8O_2$)	154.6	82 154.2

Methyl oxalate ($C_4H_6O_4$) + Isobutyric acid ($C_4H_8O_2$)			
Ampola and Rimatori, 1896			
%	D f. t.	%	D f. t.
0.35	-0.15	6.73	-2.53
0.83	0.36	7.86	2.92
1.60	0.62	9.56	3.53
2.31	0.94	12.91	4.57
3.28	1.27	16.74	5.83
4.48	1.77	25.53	8.39
Methyl oxalate ($C_4H_6O_4$) + Valerianic acid ($C_5H_{10}O_2$)			
Ampola and Rimatori, 1896			
%	D f. t.	%	D f. t.
0.23	-0.08	5.41	-1.83
0.56	0.20	6.49	2.16
1.02	0.36	8.03	2.72
1.70	0.63	9.92	3.33
2.34	0.84	12.23	3.98
3.12	1.15	16.61	5.16
4.25	1.48	24.37	6.01
Methyl oxalate ($C_4H_6O_4$) + Chloracetic acid ($C_2H_3O_2Cl$)			
Kendall and Booge, 1916			
mol%	f. t.	mol%	f. t.
0	53.2	56.5	29.4
10.7	49.3	65.3	37.6
23.5	44.7	69.1	40.8
29	41.0	75.8	45.3
35.7	37.3	83.4	51.8
42.8	32.6	91.1	56.9
49.9	27.6	100	61.7
50.7	27.0		
Methyl oxalate ($C_4H_6O_4$) + Trichloroacetic acid ($C_2HO_2Cl_3$)			
Kendall and Booge, 1916			
%	f. t.	%	f. t.
0	53.3	54.7	2.3
8.7	49.4	60.0	2.5
19.4	42.9	66.2	15.5
27.1	36.4	73.1	27.5
36.4	28.4	82.8	41.6
43.3	20.0	91.7	50.9
50	10.3	100	57.9

Lecat, 1949					
Ethyl oxalate (C ₆ H ₁₀ O ₄) (b.t.=185.65) + Acids.					
2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Valeric acid	(C ₅ H ₁₀ O ₂)	186.35	37	182.5	-1.6 (12%)
Isovaleric acid	(C ₅ H ₁₀ O ₂)	176.5	84	176.3	-2.0 (80%)
Chloracetic acid	(C ₂ H ₃ O ₂ Cl)	189.05	70	190.25	-
Ethyl oxalate (C ₆ H ₁₀ O ₄) + Trichloroacetic acid (C ₂ HO ₂ Cl ₃)					
Kendall and Booge, 1916					
mol%	f. t.	mol%	f. t.		
0	-41.0	61.1	1.9		
10.4	-43.5	66.7	3.4 (1+2)		
17.5	-46.5	67.2	3.4		
25.4	-46.5	64.1	-10.6		
30.7	-35.0	69.2	+8.5		
36.9	-23.6	77	25.5		
43.3	-13.9	82.2	38.8		
50	-5.9	91.3	50.5		
51.7	-4.1	100	58.6		
57.3	+0.1				
Propyl oxalate (C ₈ H ₁₄ O ₄) + Heptanoic acid (C ₇ H ₁₄ O ₂)					
Lecat, 1949					
%	b. t.				
0	214				
7	213.8 Az				
100	222.0				
Isoamyl oxalate (C ₁₂ H ₂₂ O ₄) + Caprinic acid (C ₁₀ H ₂₀ O ₂)					
Lecat, 1949					
%	b. t.				
0	268.0				
35	266.0 Az				
100	268.8				

Isoamyl oxalate (C ₁₂ H ₂₂ O ₄) + Phenylacetic acid (C ₈ H ₈ O ₂)			
Lecat, 1949			
%	b. t.		Sat. t.
0	268.0		46 Az
50	262.35		
100	266.5		
Methyl malonate (C ₅ H ₈ O ₄) + Valeric acid (C ₅ H ₁₀ O ₂)			
Lecat, 1949			
%	b. t.		Dt mix.
0	181.4		-1.3
10	-		
15	180.5		
100	186.35		
Methyl malonate (C ₅ H ₈ O ₄) + Isovaleric acid (C ₅ H ₁₀ O ₂)			
Lecat, 1949			
%	b. t.		Dt mix.
0	181.4		-2.0
55	180.5 Az		
80	-		
100	176.5		
Methyl malonate (C ₅ H ₈ O ₄) + Trichloroacetic acid (C ₂ HO ₂ Cl ₃)			
Kendall and Booge, 1916			
mol%	f. t.	mol%	f. t.
0	-62.0	62.3	-28.7
39.1	-60.0	65	-15.1
45.6	-46.1	71.3	+8.7
50	-39.0	75.8	21.7
54.2	-34.0	80.7	32.3
58.3	-31.0	89.4	47.7
62.2	-29.2	100	58.9

Ethyl malonate ($C_7H_{12}O_4$) + Caproic acid($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	199.35	
10	-	-1.3
12	198.5 Az	
100	205.15	

Ethyl malonate ($C_7H_{12}O_4$) + Isocaproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	199.35
42	196.5 Az
100	199.5

Methyl succinate ($C_6H_{10}O_4$) + Acetic acid
($C_2H_4O_2$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	18.2	57.4	-2.2
9.9	15.5	67.3	-5.3
20.7	12.4	77.1	+1.4
30.7	9.3	82.3	5.2
39.5	6.2	93.9	12.7
47.7	2.5	100	16.4

Methyl succinate ($C_6H_{10}O_4$) + Isocaproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	195.5
20	194.2 Az
100	199.5

Methyl succinate ($C_6H_{10}O_4$) + Chloracetic acid
($C_2H_3O_2Cl$)

Lecat, 1949

%	b. t.
0	195.5
28	197.0 Az
100	189.05

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	18.2	57.7	18.0
9.7	14.8	58.1	18.5
19.0	10.8	65.3	28.1
28.6	5.9	73.3	38.0
37.6	0.1	81.9	47.4
43	-3.5	91.5	56.2
50.2	+7.4	100	61.9

Methyl succinate ($C_6H_{10}O_4$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Booge, 1916

%	f. t.	%	f. t.
0	18.2	55.1	+1.9
8.5	15.4	56.6	2.7
18	10.7	59.7	5.5
22.8	6.8	62.9	7.1
30.1	1.4	66.8	8.0 (1+2)
35.5	-4.2	69.8	7.0
39.7	-9.8	73.3	5.5
43.1	-13.4	76.8	17.7
47.5	-6.9	84.2	37.2
49.5	-3.3	91.4	49.7
52.5	-1.0	100	58.1

Ethyl succinate ($C_8H_{14}O_4$) + Heptanoic acid
($C_7H_{14}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	217.25	-
20	216.0	-2.0
100	222.0	-

Ethyl succinate ($C_8H_{14}O_4$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

%	f. t.	%	f. t.
0	-20.8	71.9	-9.1
9.2	-23.3	76.1	+9.5
17.3	-26.5	80.5	25.5
24.9	-30.2	85.5	38.2
32.7	-35.6	90.1	47.1
40.2	-44.0	100	58.3
69.1	-26.0		

Propyl succinate ($C_{10}H_{18}O_4$) + Pelargonic acid ($C_9H_{18}O_2$)

Lecat, 1949

%	b. t.
0	250.5
20	249.8 Az
100	254.0

Propyl succinate ($C_{10}H_{18}O_4$) + Benzoic acid ($C_7H_6O_2$)

Lecat, 1949

%	b. t.
0	250.5
43	248.0 Az
100	150.8

Methyl pyruvate ($C_4H_6O_3$) + Propionic acid ($C_3H_6O_2$)

Lecat, 1949

%	b. t.
0	137.5
25	137.2 Az
100	141.3

Ethyl pyruvate ($C_5H_8O_3$) + Isobutyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.
0	155.5
60	153.0 Az
100	154.6

Methyl fumarate ($C_6H_8O_4$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Lecat, 1949

%	b. t.
0	193.25
40	195.7 Az
100	189.05

Methyl maleate ($C_6H_8O_4$) + Caproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	204.05	
37	201.5 Az	
50	-	-2.0
100	205.15	

Methyl maleate ($C_6H_8O_4$) + Isocaproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	204.05
60	198.5 Az
100	199.5

Ethyl maleate ($C_8H_{12}O_4$) + Heptanoic acid ($C_7H_{14}O_2$)

Lecat, 1949

%	b. t.
0	223.3
50	220.0 Az
100	222.0

Ethyl fumarate ($C_8H_{12}O_4$) + Heptanoic acid ($C_7H_{14}O_2$)			Butoxyglycol acetate ($C_8H_{16}O_3$) + Isovaleric acid ($C_5H_{10}O_2$)		
Lecat, 1949			Lecat, 1949		
%	b. t.		%	b. t.	
0	217.85		0	171.75	
22	216.4	Az	66	178.0	Az
100	222.0		100	176.5	
Methoxy glycol acetate ($C_7H_{10}O_3$) + Propionic acid ($C_3H_6O_2$)			Butoxydiglycol acetate ($C_{10}H_{20}O_4$) + Benzoic acid ($C_7H_6O_2$)		
Lecat, 1949			Lecat, 1949		
%	b. t.	Dt mix.	%	b. t.	
0	144.6		0	245.3	
35	-	-1.1	70	251.8	Az
36	146.85		100	250.8	
100	141.3				
Ethoxyglycol acetate ($C_6H_{12}O_3$) + Butyric acid ($C_4H_8O_2$)			Ethyl diacetyl glycerate ($C_9H_{18}O_5$) + Acetic acid ($C_2H_4O_2$)		
Lecat, 1949			Frankland and Pickard, 1896		
%	b. t.	Dt mix.	%	D f. t.	% D f. t.
0	156.8		99.0	-0.310	91.9 -2.040
38	-	-1.3	97.7	0.705	87.9 3.250
82	164.3		95.8	1.270	86.2 3.860
100	164.0				
Ethoxyglycol acetate ($C_6H_{12}O_3$) + Isobutyric acid ($C_4H_8O_2$)			%	t	d (α) _D
Lecat, 1949			96.7	15.1	1.0599 -28.74
%	b. t.	Dt mix.	80.0	15.4	1.0783 -19.44
0	156.8				
38	159.5	Az			
50	-	-1.2			
100	154.6				
Butoxyglycol acetate ($C_8H_{16}O_3$) + Butyric acid ($C_4H_8O_2$)			Ethyl acetoacetate ($C_6H_{10}O_3$) + Isovaleric acid ($C_5H_{10}O_2$)		
Lecat, 1949			Lecat, 1949		
%	b. t.		%	b. t.	Dt mix.
0	171.75		0	180.5	
5	172.0	Az	75	-	-2.0
100	164.0		77	176.1	Az
			100	176.5	

Perchlormethyl formate (C ₂ O ₂ Cl ₄) + Acetic acid (C ₂ H ₄ O ₂)					Ethyl trichloracetate (C ₄ H ₅ O ₂ Cl ₃) + Acetic acid (C ₂ H ₄ O ₂)				
Hentschel, 1888					Usanovich, Bilyalov and Krasnomolova, 1956				
%		f. t.			t		p		
100		16.21		90.921	100 %				
98.895		15.97		83.30	41.2		37		64.1
91.900		15.17		79.61	44.5		45		74.5
					60.0		93		83.5
							79.6 %		
					53.5		55		62.5
					57.5		66		68.0
					60.0		78		71.3
							61.6 %		
					53.5		49		65.3
					57.5		57		68.3
					60.0		66		71.5
							43.8 %		
					46.0		29		64.5
					54.0		43		68.5
					60.0		56		72.0
							34.8 %		
					50.3		31		68.0
					55.5		39		71.5
					60.0		49		73.5
							17.6 %		
					46.0		17		60.0
					51.5		24		66.0
					56.5		30		70.0
							0.0 %		
					60.0		15		79.0
					69.0		22		84.0
					73.5		29		48
%		b. t.			%		d		
							25°		40°
									60°

Ethyl trichloracetate ($C_4H_5O_2Cl_3$)
+ Butyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.
0	167.2
-	163.5 Az
100	164.0

Ethyl bromacetate ($C_4H_7O_2Br$)
+ Butyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	158.8	-
16	157.4 Az	-
20	-	-0.3
100	164.0	-

Ethyl bromacetate ($C_4H_7O_2Br$)
+ Isobutyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	158.8	-
50	-	-0.5
60	153.0 Az	-
100	154.6	-

Ethyl bromisobutyrate ($C_6H_{11}O_2Br$)
+ Butyric acid ($C_4H_8O_2$)

Lecat, 1949

%	b. t.
0	163.7
-	161.5 Az
100	164.0

Benzyl formate ($C_8H_8O_2$) + Caproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	203.0
20	202.2 Az
100	205.15

Benzyl formate ($C_8H_8O_2$) + Isocaproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	203.0
62	198.8 Az
100	149.5

1-Naphthyl acetate ($C_{12}H_{10}O_2$)
+ Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

mol %	f. t.	mol %	f. t.
0	44.8	53.9	10.2
9.6	40.0	59.3	8.0
17.7	34.8	69.6	6.0
23.1	29.7	70.0	21.0
30.4	23.6	76.7	33.5
36.0	16.5	84.5	44.5
41.4	7.5	91.9	51.9
45.7	10.0	100	58.0
49.9	10.7 (1+1)		

2-Naphthyl acetate ($C_{12}H_{10}O_2$)
+ Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

mol %	f. t.	mol %	f. t.
0	68.5	54.4	65.7
10.1	63.9	57.0	64.8
17.6	59.4	61.9	62.3
28.9	55.5	67.6	57.7
34.8	60.9	75.5	48.7
39.9	63.6	83.9	43.8
44.9	65.4	91.4	51.5
50.0	66.3 (1+1)	100	58.2

Methyl benzoate ($C_8H_8O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Booge

mol%	f. t.	mol%	f. t.
0	-13.7 stable	37.5	-15.3 (1+1)
4.3	-15.0 "	40	-13.1 "
6.0	-16.3 "	44.2	-10.5 "
7.1	-17.0 "	47.5	-9.3 "
		50	-8.8 "
0	-12.3 unst	52.3	-9.2 "
6	-14.7 "	55.7	-10.1 "
7.6	-15.4 "	56.8	-15.6 "
9.5	-16.5 "	60.3	-4.8 "
12.8	-18.6 "	63.8	-4.2 "
16.6	-21.5 "	68.6	15.9
22	-25.5 "	73.8	20.4
25	-28.5 "	79.8	36.5
27.3	-25.5 (1+1)	85.7	44.2
29.3	-23.3 "	91.8	50.9
33.7	-18.6 "	100	57.5
34.6	-17.9 "		

Ethyl benzoate ($C_9H_{10}O_2$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.
99.13	-0.230
94.69	1.360
87.66	3.125
79.67	5.180
100	-

Kendall and Brakeley, 1921

mol%	d	η
	25°	
0	1.0458	1982
10.41	1.046	1948
21.29	1.046	1874
30.45	1.047	1797
38.82	1.047	1727
47.50	1.047	1651
58.22	1.048	1538
68.26	1.048	1446
79.56	1.049	1322
91.32	1.049	1202
100	1.050	1121

Kendall and Gross, 1921

mol%	$\kappa \cdot 10^7$	mol%	$\kappa \cdot 10^7$
0 below	0.01	74.69	0.38
10.15	0.04	84.60	0.43
28.78	0.08	91.74	0.38
44.07	0.16	100	0.24
61.45	0.28		

Ethyl benzoate ($C_9H_{10}O_2$) + Trichloroacetic acid
($C_2HCl_3O_2$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	-32.7	55.8	-24.0
12.3	38.4	59.3	10.1
21.2	45.0	64.7	+6.0
29.0	38.5	70.2	20.0
35.6	31.6	75.6	30.5
38.9	28.5	80.3	38.5
45.6	24.7	86.0	46.2
50.0	23.4	92.8	53.2
52.7	23.5	100	58.7

Kendall and Brakeley, 1921

mol%	d	η
	25°	
0	1.0458	1982
8.874	1.0864	2324
20.96	1.1466	2930
31.25	1.1915	3711
39.82	1.2413	4610
49.07	1.2922	5848
57.95	1.3501	7068
67.58	1.4027	8374
100	1.62	683

Kendall and Gross, 1921

mol%		$\kappa \cdot 10^7$		mol%		$\kappa \cdot 10^7$	
		25°	60°			25°	60°
0 below	0.01	-		54.81	7.80	-	
7.95	1.19	-		58.88	8.26	-	
17.93	2.08	-		68.72	7.91	13.91	
26.83	2.91	-		74.97	-	12.24	
36.59	4.14	-		84.32	-	7.57	
47.66	6.32	-		92.57	-	2.54	
51.37	7.28	-		100	-	0.06	

Ethyl benzoate ($C_9H_{10}O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Perkin, 1896

mol%	d		(α) magn.
	15°	25°	
33.3	1.0796	1.0705	1.8026
0	1.0514	1.0422	1.7533

Propyl benzoate ($C_{10}H_{12}O_2$) + Levulinic acid
($C_5H_8O_3$)

Lecat, 1949

%	b. t.
0	230.85
7	230.0 Az
100	252

Butyl benzoate (C ₁₁ H ₁₄ O ₂) + Benzoic acid(C ₇ H ₆ O ₂)		
Lecat, 1949		
%	b. t.	
0	249.0	
35	245.5 Az	
100	250.8	

Isobutyl benzoate (C ₁₁ H ₁₄ O ₂) + Benzoic acid (C ₇ H ₆ O ₂)		
Lecat, 1949		
%	b. t.	sat. t.
0	241.9	
12	241.15	48.5
100	250.8	

Isoamyl benzoate (C ₁₂ H ₁₆ O ₂) + Phenyl acetic acid (C ₈ H ₈ O ₂)		
Lecat, 1949		
%	b. t.	Sat. t.
0	262.0	-
26	259.85	30
100	266.5	-

Isoamyl benzoate (C ₁₂ H ₁₆ O ₂) + Levulinic acid (C ₅ H ₈ O ₃)		
Lecat, 1949		
%	b. t.	
0	262.0	
25	238.6 Az	
100	252	

Phenyl benzoate (C ₁₃ H ₁₀ O ₂) + Trichloroacetic acid (C ₂ HO ₂ Cl ₃)			
Kendall and Booge, 1916			
mol%	f. t.	mol%	f. t.
0	67.8	59.7	13.2
12.6	62.8	65	11.5
21.6	57.3	69.3	21.0
29.1	52.1	76.7	33.7
35.5	46.7	84.8	44.7
47.3	33.0	92.0	52.1
49.8	29.6	100	58.5
56.2	19.0		

Benzyl benzoate (C ₁₄ H ₁₂ O ₂) + Acetic acid (C ₂ H ₄ O ₂)		
Kendall and Gross, 1921		
mol%	κ. 10 ⁷	
0	below 0.01	
22.76	"	
73.81	"	
100	0.24	

Benzyl benzoate (C ₁₄ H ₁₂ O ₂) + Trichloroacetic acid (C ₂ HO ₂ Cl ₃)			
Kendall and Booge, 1916			
mol%	f. t.	mol%	f. t.
0	18.3	45.9	10.9
9.2	15.4	49.8	11.9 (1+1)
19.1	13.3	51.2	11.8
23.9	6.8	55.4	11.5
25.2	6.4	60.21	10.2
27.9	4.5	64.4	10.0
28.7	4.0	70	21.6
30.1	2.0	74.8	30.3
32.5	-1.0	80.3	38.7
30.2	-1.5	86.2	45.5
32.5	+1.5	93.7	53.1
36.9	6.5	100	57.9
42.1	9.5		

Kendall and Gross, 1921			
mol%	κ. 10 ⁷	mol%	κ. 10 ⁷
	25°		25° 60°
0	0.01	67.25	0.80 -
6.94	0.12	74.72	0.84 2.28
16.15	.13	81.96	- 2.17
26.05	.16	88.96	- 1.37
37.58	.23	94.50	- 0.70
49.28	.47	100	- 0.06
57.01	.68		
59.54	.73		

Methyl phenylacetate (C ₉ H ₁₀ O ₂) + Phenylacetic acid (C ₈ H ₈ O ₂)				
Bakunin and Vitale, 1935				
mol%	f. t.	mol%	f. t.	E
100	76.7	30.54	14.5	- (1+1)
90.23	70	25.49	7	- "
80.50	63	20.42	-4	- "
70.55	55	17.19	-14	-63 "
60.62	46	15.14	-24	-67 "
50.60	36	10.24	-54	-66 "
40.70	24	7.29	-52	- "
		0	-38	- "

Ethyl phenylacetate ($C_{10}H_{12}O_2$) + Phenylacetic acid ($C_8H_8O_2$)

Bakunin and Vitale, 1935

mol%	f. t.	f. t.	f. t.
0.00	-30	53.70	43 (1+1)
11.38	-38	64.44	48 "
22.43	-38 (1+1)	72.98	57
28.00	0	82.25	64
33.13	+36	90.42	70
43.60	36	100.0	76.7

Benzyl phenylacetate ($C_{15}H_{14}O_2$) + Phenylacetic acid ($C_8H_8O_2$)

Bakunin and Vitale, 1935

mol%	f. t.	E	mol%	f. t.	E
100	76.7	-	48.41	38	-13
92.71	72.3	-	37.62	27	-13
84.92	67	-14	23.83	6	-17
76.66	62	-	13.52	-13	-13
67.87	57.5	-	0	-6	-
58.48	48.5	-13			

p-Methyl toluate ($C_9H_{10}O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	33.2	53.6	8.6
13.3	28.8	57.8	7.1
19	25.4	62.3	3.4
24.5	21.1	66.2	11.0
31.6	13.6	73.6	28.6
37.9	4.7	83.2	43.1
42.5	6.0	91.1	52.0
47	8.2	100	59.2
50	9.0 (1+1)		

Methyl cinnamate ($C_{10}H_{10}O_2$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	34.4	59.5	30.0
15.2	27.4	74.8	43.5
22.8	23.4	85.2	51.9
26.6	20.0	89.8	55.3
36.1	14.5	96.0	59.2
43.2	14.0	100	61.4
50.9	22.0		

Methyl cinnamate ($C_{10}H_{10}O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	34.7	49.8	8.5 (1+1)
8.8	30.8	53.1	7.7
18.2	25.0	56.8	6.0
25.7	18.4	62	1.9
32.0	10.9	64.8	6.5
36.8	+3.3	69	17.8
40.1	-3.7	75.1	30.0
40.1	+3.2	82.9	41.9
43.5	6.4	90.6	50.4
47.6	7.9	100	58.3

Methyl cinnamate ($C_{10}H_{10}O_2$) + Phenyl acetic acid ($C_8H_8O_2$)

Lecat, 1949

%	b. t.
0	261.9
3	261.8 Az
100	266.5

Methyl anisate ($C_9H_{10}O_3$) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	48.3	50	-6.3 (1+1)
8.6	43.7	55.1	-7.0
15.3	39.2	59.4	-9.5
21.2	34.0	62.4	-6.5
26.9	27.9	65.4	+5.0
32.8	19.5	70.5	17.0
38.4	9.5	77.3	31.5
41.8	0	83.5	41.1
43.8	-5.5	90.8	50.6
45.3	-7.4	100	58.1

Methyl terephthalate ($C_{10}H_{10}O_4$) + Trichloroacetic acid ($C_2H_2O_2Cl_3$)

Kendall and Booge, 1916

mol%	f. t.	mol%	f. t.
0	140.3	75.1	26.7
10.8	135.4	77.3	27.6
19.8	129.5	78.1	27.7
29.2	121.7	80	27.9 (1+4)
38.5	111.0	77.3	21.5
47.1	98.2	80	28.2
53.9	85.6	80.8	30.4
62.7	59.7	44.1	37.9
66.6	46.3	91.7	50.1
71.9	36.4	100	57.8

Methyl dibenzoyl glycerate ($C_{18}H_{16}O_6$) + Acetic acid ($C_2H_4O_2$)

Frankland and Pickard, 1896

%	D f. t.	%	D f. t.
active		inactive	
98	-0.250	97.6	-0.300
96.7	.460	94.6	0.770
96.1	.495	92.5	1.095
94.6	.690	90.4	1.385
93.9	.710	88.2	1.750
92.8	.970	0	-
92.7	1.000		
92.7	.045		
92.2	.080		
90.6	.330		
88.6	.840		
88.3	.830		
88.1	.850		
86.2	2.345		

%	t	d	(α) _D
98.3	16.2	1.0561	34.34
96.2	16.7	.0694	33.27
91.4	15.6	.0699	32.45
87.7	16.8	.0750	32.61
84.4	16.3	.0820	32.38

Sulfonal ($C_7H_6O_4S_2$) + Benzoic acid ($C_7H_6O_2$)

A and L Kofler, 1948

E: 43.50% 95°

Methyl sulfate ($C_2H_6O_4S$) + Valeric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.
0	189.1
40	182.0 Az
100	186.35

Methyl sulfate ($C_2H_6O_4S$) + Isovaleric acid ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.
0	189.1
60	175.0 Az
100	176.5

Methyl sulfate ($C_2H_6O_4S$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Lecat, 1949

%	b. t.
0	189.1
-	194.5 Az
100	189.05

K. NITROGEN DERIVATIVES + HYDROXYL DERIVATIVES .

XXXI. NITROGEN DERIVATIVES + ALCOHOLS .

Methylamine (CH_5N) + Saccharose ($\text{C}_{12}\text{H}_{22}\text{O}_{11}$)

Fitzgerald, 1912

M	d	η
	18°	
1.4403	1.016	44700
0.970	0.9156	3370

Isopropylamine ($\text{C}_3\text{H}_9\text{N}$) + Isopropyl alcohol
($\text{C}_3\text{H}_8\text{O}$)

Thacker and Rowlinson, 1954

mol %	Dv (cc/mole)	Q mix
25°		
90	-0.48	-220
80	-0.84	-400
70	-1.07	-510
60	-1.25	-580
50	-1.32	-600
40	-1.26	-570
30	-1.08	-480
20	-0.85	-350
10	-0.50	-118

mol %	56°	D_{η}/η 80°	100°
83	0.000	-0.013	-
79	-	-	-0.010
51	-0.002	-0.012	-
50	-	-	-0.016
22	-	-0.008	-
21	-	-	0.000
18	-0.001	-	-

Decylamine ($\text{C}_{10}\text{H}_{21}\text{N}$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and al., 1944.

%	f.t.	%	f.t.
76.33	-40.0	15.35	0.0
36.89	-20.0	0	+16.11

Decylamine ($\text{C}_{10}\text{H}_{21}\text{N}$) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
92.20	-40.0	22.22	0.0
52.360	-20.0	0	+16.11

Decylamine ($\text{C}_{10}\text{H}_{21}\text{N}$) + Isopropyl alcohol
($\text{C}_3\text{H}_8\text{O}$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
89.88	-40.0	30.47	0.0
67.11	-20.0	0	+16.11

Decylamine ($\text{C}_{10}\text{H}_{21}\text{N}$) + Butyl alcohol ($\text{C}_4\text{H}_{10}\text{O}$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
91.53	-40.0	35.53	0.0
76.52	-20.0	0	+16.11

Dodecylamine ($\text{C}_{12}\text{H}_{27}\text{N}$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
95.47	-40.0	9.71	+20.0
77.21	-20.0	0	28.32
33.78	0.0		

Dodecylamine ($\text{C}_{12}\text{H}_{27}\text{N}$) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
98.04	-40.0	13.16	+20.0
86.64	-20.1	0	28.32
46.51	0.0		

Dodecylamine ($C_{12}H_{27}N$) + Isopropyl alcohol
(C_3H_8O)
Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
95.56	-40.0	16.90	+20.0
86.96	-20.0	0	28.32
57.14	0.0		

Dodecylamine ($C_{12}H_{27}N$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
97.64	-40.0	19.87	+20.0
92.23	-20.0	0	28.32
63.69	0.0		

Tetradecylamine ($C_{14}H_{31}N$) + Methyl alcohol
(CH_3O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
99.84	-40.0	25.53	+20.0
97.26	-20.0	13.80	30.0
61.73	0.0	0	38.19

Tetradecylamine ($C_{14}H_{31}N$) + Ethyl alcohol
(C_2H_6O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
98.53	-20.0	13.16	30.0
76.78	0.0	0	38.19
31.45	+20.0		

Tetradecylamine ($C_{14}H_{31}N$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
99.40	-40.0	39.54	+20.0
96.47	-20.0	17.93	30.0
79.94	0.0	0	38.19

Tetradecylamine ($C_{14}H_{31}N$) + Butyl alcohol
($C_4H_{10}O$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
99.81	-40.0	43.48	+20.0
97.64	-20.0	19.81	30.0
85.83	0.0	0	38.19

Hexadecylamine ($C_{16}H_{35}N$) + Methyl alcohol
(CH_3O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
99.8	-20.0	28.16	30.0
94.31	0.0	11.30	40.0
46.49	+20.0	0	46.77

Hexadecylamine ($C_{16}H_{35}N$) + Ethyl alcohol
(C_2H_6O)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
97.08	0.0	11.50	40.0
54.65	20.0	0	46.77
29.72	30.0		

Hexadecylamine ($C_{16}H_{35}N$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and al.

%	f.t.	%	f.t.
99.6	-20.0	37.74	30.0
93.26	0.0	14.71	40.0
59.52	+20.0	0	46.77

Hexadecylamine ($C_{16}H_{35}N$) + Butyl alcohol
($C_4H_{10}O$)

Ralston, Hoerr and al., 1944

%	f.t.	%	f.t.
99.9	-20.0	40.73	30.0
96.73	0.0	16.27	40.0
64.52	+20.0	0	46.77

Octadecylamine ($C_{18}H_{39}N$) + Methyl alcohol
(CH_4O)

Ralston, Hoerr and al., 1944

%	f. t.	%	f. t.
99.4	0.0	29.18	40.0
86.43	20.0	6.50	50.0
51.28	30.0	0	53.06

Octadecylamine ($C_{18}H_{39}N$) + Ethyl alcohol
(C_2H_6O)

Ralston, Hoerr and al., 1944

%	f. t.	%	f. t.
99.9	0.0	26.32	40.0
93.47	20.0	5.79	50.0
57.14	30.0	0	53.06

Octadecylamine ($C_{18}H_{39}N$) + Isopropyl Alcohol
(C_3H_8O)

Ralston, Hoerr and al., 1944

%	f. t.	%	f. t.
99.51	0.0	30.69	40.0
76.92	20.0	7.00	50.0
53.76	30.0	0	53.06

Octadecylamine ($C_{18}H_{39}N$) + Butyl Alcohol
($C_4H_{10}O$)

Ralston, Hoerr and al., 1944

%	f. t.	%	f. t.
99.6	0.0	32.69	40.0
81.51	20.0	7.46	50.0
57.14	30.0	0	53.06

Diethylamine ($C_4H_{11}N$) + Ethyl alcohol (C_2H_6O)
Copp and Everett, 1953

P	L	mol %	V
30°15			
100	72.5		57.5
150	55		25
200	40		13
290	0		0
40°25			
140	100		100
150	80		70
200	60		33
250	50		20
250	38		13
300	26		7
440	0		0
50°00			
215	100		100
250	78		65
300	65		44
350	56		30
400	45		18
450	37		13
500	27		9
550	18		4
625	0		0
59°95			
350	100		100
400	75		62
450	65		57
500	58		36
600	45		23
680	34		15
880	0		0

Hatem, 1951

%	χ
0	-0.812
20	-0.788
40	-0.768
60	-0.749
80	-0.734
88	-0.732
100	-0.742

Tichacek, Kmak and Drickamer, 1956

mol %	D therm.	mol %	D therm.
43.0	-1.11	80.4	-0.59
54.0	-0.85	90.9	-0.88
68.3	-0.48	97.1	-1.12

DIETHYLAMINE + ETHYL ALCOHOL

653

Diocetylamine (C ₁₆ H ₃₅ N) + Methyl alcohol (CH ₄ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
63.29	-10.0
1.49	+10.0
0	14.60
Dilaurylamine (C ₂₄ H ₅₁ N) + Ethyl alcohol (C ₂ H ₆ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
99.8	10.0
83.74	30.0
35.09	40.0
Dilaurylamine (C ₂₄ H ₅₁ N) + Isopropyl alcohol (C ₃ H ₈ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
97.86	10.0
64.52	30.0
25.42	40.0
Dilaurylamine (C ₂₄ H ₅₁ N) + Butyl alcohol (C ₄ H ₁₀ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
99.6	-10.0
96.78	+10.0
61.73	30.0
Ditridecylamine (C ₂₆ H ₅₅ N) + Methyl alcohol (CH ₄ O)	
Hoerr, Harwood and Ralston, 1944	
%	f. t.
93.37	40.0
75.69	50.0

Ditridecylamine ($C_{26}H_{55}N$) + Ethyl alcohol
(C_2H_6O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
95.83	30.0	13.26	50.0
69.89	40.0	0	56.5

Ditridecylamine ($C_{26}H_{55}N$) + Isopropyl alcohol
(C_3H_8O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
91.16	30.0	11.91	50.0
55.87	40.0	0	56.5

Ditridecylamine ($C_{26}H_{55}N$) + Butyl alcohol
($C_4H_{10}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
99.0	10.0	12.50	50.0
84.62	30.0	0	56.5
49.40	40.0		

Ditetradecylamine ($C_{28}H_{59}N$) + Methyl alcohol
(CH_4O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
87.72	50.0	0	60.6
85.47	60.0		

Ditetradecylamine ($C_{28}H_{59}N$) + Ethyl alcohol
(C_2H_6O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
99.6	30.0	30.80	50.0
92.74	40.0	0	60.6

Ditetradecylamine ($C_{28}H_{59}N$) + Isopropyl alcohol
(C_3H_8O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
99.4	30.0	27.34	50.0
87.69	40.0	0	60.6

Ditetradecylamine ($C_{28}H_{59}N$) + Butyl alcohol
($C_4H_{10}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
99.9	10.0	28.57	50.0
94.06	30.0	0	60.6
75.87	40.0		

Dipentadecylamine ($C_{30}H_{63}N$) + Ethyl alcohol
(C_2H_6O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
98.20	40.0	5.74	60.0
60.24	50.0	0	63.3

Dipentadecylamine ($C_{30}H_{63}N$) + Isopropyl alcohol
(C_3H_8O)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
97.85	40.0	5.56	60.0
58.43	50.0	0	63.3

Dipentadecylamine ($C_{30}H_{63}N$) + Butyl alcohol
($C_4H_{10}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
99.0	30.0	7.00	60.0
89.82	40.0	0	63.3
50.00	50.0		

Trilaurylamine ($C_{36}H_{75}N$) + Isopropyl alcohol
 (C_3H_8O)

Ralston, Hoerr and Du Brow, 1944

%	f.t.	sat.t.
99.9	0.0	-
97.43	10.0	-
86.78	-	20.0
80.86	-	30.0
63.29	-	40.0
0	15.7	-

 Trilaurylamine ($C_{36}H_{75}N$) + Butyl alcohol
 ($C_4H_{10}O$)

Ralston, Hoerr and Du Brow, 1944

%	f.t.	%	f.t.
99.90	-10.0	79.64	+10.0
98.50	0.0	0	15.7

 Trioctadecylamine ($C_{54}H_{111}N$) + Butyl alcohol
 ($C_4H_{10}O$)

Ralston, Hoerr and Du Brow, 1944

%	f.t.	%	f.t.
99.80	40.0	0	54.0
85.47	50.0		

 Allylamine (C_3H_7N) + Saccharose ($C_{12}H_{22}O_{11}$)

Wilcox, 1902

%	d	α_D
	27°	25°
6.25	0.795	3.75
12.50	0.826	7.75
25.00	0.898	16.63

 Ethylenediamine ($C_2H_8N_2$) + Methyl alcohol
Elgort, 1936 (CH_4O)

mol %	gr %	d	25°
100	100	0.8104	0.7870
94.9	90.8	8295	8069
77.3	78.6	8533	8312
80	68.1	8713	8485
74.5	60.9	8797	8565
70.3	55.7	8850	8619
66.2	51.2	8913	8684
62.7	47.4	8957	8731
59.4	43.8	8989	8763
54.0	39.5	9028	8784
52	36.6	9054	8795
49.6	34.5	9073	8807
43.3	29.0	9085	8820
34.2	21.5	9094	8861
19.3	11.3	9122	8894
0	0	9149	8924

mol %	0°	η	25°
100	836		563
94.9	1199		764
87.3	1767		1008
80	2428		1195
74.5	2930		1347
70.3	3355		1426
66.2	3477		1481
62.7	3519		1494
59.4	3563		1522
55	3524		1530
52	3512		1522
49.6	3500		1520
43.3	3372		1498
34.2	3204		1466
19.3	2981		1376
0	2615		1265

mol %	gr %	f.t.	E
100	100	-97.0°	-106.0°
97.1	94.5	-99.0°	-106.0°
94.2	89.6	-101.8°	-106.0°
89.9	82.6	-100.5°	-106.5°
84.9	75	-77.0°	-107.0°
80.9	69.4	-64.0°	-104.0°
76.9	64.6	-54.5°	-106.5°
70.3	55.7	-48.0°	----
66.2	51.2	-47.5°	-48.0°
64.2	48.8	-45.0°	-49.0°
59.4	43.8	-39.5°	-48.0°
53.5	38	-30.5°	-43.5°
49.6	34.5	-25.0°	-48.5°
47.2	32.2	-20.0°	-48.5°
43.3	29	-15.0°	-48.8°
35	22.4	-7.5°	-48.0°
22.8	13.5	+1.0°	-48.0°
15.1	8.5	+4.5°	-48.0°
7.7	4.5	7.5°	-48.0°
6.0	3.4	8.0°	----
0	0	8.5°	----

(1+2)

Ethylenediamine (C₂H₈N₂) + Pinacol (C₆H₁₄O₂)

Pushin and Dimitrijevitch, 1947

mol %	f.t.	E
0	8.8	-
9.6	4.7	-
16.1	1.0	-1.0
21.1	4.5	-
26.3	9.8	-2.0
39.5	14.5	-
42	18.2	-
50.3	18.5	-
53.7	17.5	-
59.8	15.0	+ 4.6
66.25	11.0	-
67.25	9.8	+ 7.1
71.0	14.8	+ 7.5
76	22.3	-
84	32	-
100	42.8	-
(1+1)		

Ethylenediamine (C₂H₈N₂) • Diphenylcarbinol (C₁₅H₁₈O)

Pushin and Dimitrijevitch, 1947

mol %	f.t.	E
0	9	-
10	4	-3
20	1	-3
30	4	-3
40	17	-
50	25	-
60	32	-
66.6	34	-
71	29	29
80	45	29
90	57	28
100	65	-
(1+2)		

Ethylenediamine (C₂H₈N₂) + Triphenylcarbinol (C₁₉H₁₆O)

Pushin and Dimitrijevitch, 1947

mol %	f.t.	E
0	9	-
5	41	-2
15	65	-2
30	89	-
40	97	-
50	101	97
55	108	97
60	115	97
66.6	123	96
70	128	-
100	163	-
(1+1)		

Aniline (C₆H₇N) + Methyl alcohol (CH₃O)

Weissenberger, Schuster and Lielacker, 1947

mol %	p	mol %	p
100	96.0	20° 50	54.9
90	87.2	40	46.2
80	79.6	30	37.4
70	71.3	20	28.4
60	63.2	10	16.6

Holmes and Sageman, 1909

%	d
25°	
0	1.01760
8.367	0.999530
14.660	0.985211
20.982	0.970961
25.445	0.960291
33.676	0.941142
44.948	0.914713
100	0.78810

Hartung, 1917

%	mol %	d 25°
0	0	1.01744
8.21	20.63	0.99964
14.22	32.52	0.98602
19.95	41.99	0.97271
24.58	48.63	0.96193
29.40	54.74	0.95056
36.62	62.67	0.93360
42.00	67.77	0.92097
54.10	77.40	0.89283
57.71	79.86	0.88416
74.71	89.56	0.84489
100	100	0.78740

Hatem, 1949

%	χ	%	χ
100	-0.690	40	-0.677
90	-0.685	20	-0.664
50	-0.690	0	-0.648

Timofeev, 1905

%	U
20°	
0	0.4915
37.4	0.602
100	0.600

Hartung, 1917

%	mol %	U
0	0	25° 0.484
8.21	20.63	0.512
14.22	32.52	0.534
19.95	41.99	0.547
24.58	48.63	0.553
29.40	54.74	0.568
36.62	62.67	0.571
42.00	67.77	0.577
54.10	77.40	0.595
57.71	79.86	0.587
74.71	89.56	0.601
100	100	0.605

Timofeev, 1905

initial	%	final	Q mix (by mole alcohol)
0		2.45	+36.3
2.45		8.9	+86.2
8.9		13.7	+128.2
13.7		18.0	+133.4
34.4		37.4	+90

initial	final	(by mole aniline)
100	92.2	+613
92.2	84.7	+472
84.7	78.9	+390

Hartung, 1917

%	mol %	Q mix (cal/100 g)
	25°	
3.12	8.55	- 4.89
6.32	16.39	- 4.59
10.58	25.58	+ 4.69
14.48	32.97	17.4
21.01	43.59	41.9
27.65	52.61	58.2
36.01	62.05	81.2
47.30	72.28	104.9
60.61	81.72	115.1
64.32	83.97	114.7
83.49	93.62	80.1
86.42	94.86	63.7

Weissenberger, Schuster and Lielacher, 1947

mol %	Q mix
90	8
80	22
70	39
60	53
50	55
40	43
30	27
20	14
10	8

Aniline (C₆H₇N) + Ethyl alcohol (C₂H₆O)

Johst, 1883

%	d	%	d
	16.3°		
0	1.02367	61.36	0.88371
20.78	0.97522	70.54	0.86376
28.28	0.95784	100	0.80722
44.12	0.92184		

Guerdjikova, 1910

%	d	%	d
	25°		
100	0.7865	40.391	0.9206
90.195	8083	29.542	9483
79.515	8317	19.008	9713
70.293	8524	11.572	9893
63.630	8673	0	1.0174
49.128	9003		

Herz, 1930

%	d	%	d
	16.3°		
0	1.02478	40.74	0.88467
19.84	0.95888	100	.80810
33.10	.92284		

Hatem, 1949

mol %	15°	20°	d 25°	30°	35°
0	1.0256	1.0215	1.0174	1.0132	1.0090
0.299	0245	0210	0169	0128	0078
1.410	0228	0187	0145	0103	0062
5.00	0142	0180	0100	0062	0022
8.64	0141	0100	0061	0020	0.9978
13.21	0078	0039	0.9987	0.9957	9911
41.0	0.9625	0.9583	9540	9500	9458
61.558	9200	9153	9108	9057	9024
71.09	8941	8903	8863	8824	8774
77.34	8762	8726	8681	8636	8594
89.941	8343	8301	8260	8219	8175
94.95	8148	8105	8063	8020	7976
97.761	8027	7988	7948	7907	7867
99.072	7970	7929	7887	7847	7806
99.538	7955	7914	7873	7832	7788
100	7943	7901	7861	7820	7775

Migal and Belotskii, 1955

%	0°	d	20°
0	1.54		1.49
20	1.29		1.26
40	1.12		1.10
60	1.00		0.98
80	0.90		0.98
100	0.803		0.80

Drucker, 1956

vol %	d	vol %	d
25°			
17.0	0.9471	53.9	0.9086
52.1	0.9135		

Hirata, 1908

vol %	η (alcohol=1)	vol %	η (alcohol=1)
25°			
75	1.2081	96.87	1.0279
87.5	1.0864	98.44	1.0176
93.75	1.0439	99.22	1.0103

Hatem, 1949

%	η	%	η
20°			
0	4450	60	1620
10	3400	70	1460
20	2760	80	1350
30	2140	90	1260
40	2080	100	1200
50	1820		

Migal and Belotskii, 1955

mol %	0°	5°	10°	15°	20°	25°
0	10200	8000	6300	5300	4300	3800
20	7400	6000	4950	4000	3400	2950
40	5200	4350	3700	3000	2600	2200
60	3800	3000	2700	2200	1950	1700
80	2700	2200	2000	1600	1400	1200
100	1700	1500	1400	1200	1100	1000

Migal and Belotskii, 1955

mol %	0°	5°	10°	15°	20°	25°
0	45.20	45.05	43.90	43.40	42.70	42.10
20	39.90	39.30	38.80	38.20	38.00	37.40
40	34.40	33.90	33.40	32.80	32.40	32.00
60	30.20	29.90	29.40	28.80	28.30	28.00
80	27.20	26.50	26.00	25.50	25.20	24.80
100	23.90	23.20	22.80	22.40	22.10	22.00

Johst, 1883

%	H _α	n_D	H _β	H _γ
16.3°				
0	1.58135	1.58818	1.60632	1.62271
20.78	.52890	.53443	.54890	.56186
28.28	.51088	.51590	.52921	.54104
44.12	.47465	.47886	.48979	.49943
61.36	.43757	.44095	.44960	.45713
70.54	.41882	.42178	.42932	.43580
100	.36225	.36403	.36836	.37287

Müller and Guerdjikova, 1910

%	n_D	%	n_D
25°			
100	1.3596	40.39	1.4830
90.19	1.3782	28.54	1.5110
79.51	1.3993	19.01	1.5343
70.29	1.4183	11.27	1.5531
63.63	1.4317	0	1.5842
49.12	1.4630		

Hatem, 1949

mol %	15°	20°	n_D 25°	30°	35°
0	1.5900	1.5869	1.5840	1.5810	1.5780
0.299	5891	5860	5830	5800	5778
1.410	5865	5834	5804	5773	5742
8.64	5757	5725	5694	5661	5628
13.21	5695	5670	5644	5619	5595
41.0	5234	5208	5183	5158	5133
61.558	4792	4773	4750	4730	4710
77.34	4371	4348	4325	4301	4279
89.841	3998	3976	3954	3933	3912
97.761	4717	3698	3678	3658	3639
99.072	3659	3640	3622	3604	3585
99.538	3648	3630	3610	3590	3572
100	3634	3615	3596	3576	3556

Migal and Belotskii, 1955

mol %	n_D	mol %	n_D
20°			
0	1.5850	60	1.4800
20	1.5550	80	1.4300
40	1.5200	100	1.3600

Guerdjikova, 1910

%	(α) mol D magn	%	(α) mol D magn
25°			
100	4.139	40.391	9.833
90.195	4.964	28.542	11.334
79.515	5.847	19.008	12.551
70.293	6.784	11.572	13.596
63.630	7.418	0	15.338
49.128	8.956		

Muller and Guerdjikoff, 1912

%	(α) mol D magn	%	(α) mol D magn
25°			
100	4.14	40.39	9.83
90.19	4.96	28.54	11.33
79.51	5.85	19.01	12.55
70.29	6.78	11.27	13.60
63.63	7.42	0	15.34
49.12	8.96		

Drucker, 1956

vol %	n_D 25°	vol %	n_D 25°
25°			
17.0	1.5122	53.9	1.4774
52.1	1.4784		

Hatem, 1949

%	χ	%	χ
20°			
0	-0.648	60	-0.700
10	-0.680	70	-0.706
20	-0.690	80	-0.712
30	-0.694	90	-0.722
40	-0.698	100	-0.745
50	-0.698		

Timofeev, 1905

initial	%	final	Q mix (by mole alcohol)
0		5.0	-464
5.0		9.6	-305
(by mole aniline)			
100		90.9	+158
90.9		83.0	0
83.0		76.8	-58

Aniline (C_6H_7N) + Propyl alcohol (C_3H_8O)

Kremann, Meingast and Gugl, 1914

mol %	d
0	1.0415 (1-0.000844 t)
35	0.9798 (1-0.000878 t)
79.7	0.8855 (1-0.001014 t)
100	0.8208 (1-0.001024 t)

Kremann and Meingast, 1914

t	d	t	d
0 %			
13.3	1.030	80.0	0.9712
29.0	1.0162	95.8	0.9575
52.6	0.9954	107.3	0.9475
65.1	0.9843		
35 mol %			
14.0	0.9675	43.5	0.9420
22.0	0.9604	59.0	0.9200
26.6	0.9564		
80 mol %			
15.5	0.8716	40.5	0.8497
25.8	0.8623	52.5	0.8388
100 %			
15.5	0.8075	47.2	0.7807
28.5	0.7964	60.0	0.7700
39.4	0.7875	65.1	0.7653

Kremann, Meingast and Gugl, 1914

mol %	20°	Dv	70°
74.21	-0.52		-0.68
28.32	-1.05		-1.15

Kremann, Gugl and Meingast, 1914

mol %	d	η (water=1)
	12°	
0	1.0312	4.705
35	0.9696	3.062
80	0.8749	2.196
100	0.8103	2.109
	64°	
0	0.9854	2.269
35	0.9242	1.752
80	0.8290	1.406
100	0.7666	1.353

Springer and Roth, 1930

mol %	η (water=1)
	12°
0	3.6474
35	3.1832
80	2.253
100	2.171

Kremann and Meingast, 1914

t	σ	t	σ
	0 %		
13.3	42.48	70.0	37.61
20.0	41.93	80.0	36.92
29.0	40.96	95.8	35.25
52.6	39.26	107.3	34.51
65.1	37.89		
	35 mol %		
14.0	33.06	43.5	31.22
20.0	32.50	59.0	30.21
22.0	32.39	70.0	29.54
26.6	32.14		
	80 mol %		
15.5	26.71	40.5	24.96
20.0	26.41	52.5	24.02
25.8	26.01		
	100 %		
15.5	23.94	47.2	22.00
28.5	23.12	60.0	21.07
39.4	22.55	65.1	20.58

Hatem, 1949

%	χ	%	χ
	18°		
100	-0.788	40	-0.704
80	-0.733	20	-0.690
60	-0.716	0	-0.648

Timofeev, 1905

initial	%	final	Q mix (by mole aniline)
0.0		90.5	-389
90.5		81.7	-430
81.7		74.9	-402

Kremann, Meingast and Gugl, 1914

mol %	U 16°	Q mix (cal/g)
0	0.495	-
35	0.592	+2.328
80	0.662	+1.682
100	0.640	-

Aniline (C_6H_7N) + Isopropyl alcohol (C_3H_8O)

Hatem, 1949

%	χ	%	χ
	18°		
100	-0.767	40	-0.712
80	-0.728	20	-0.700
60	-0.720	0	-0.650

Aniline (C_6H_7N) + Isobutyl alcohol ($C_4H_{10}O$)

Ampola and Rimatori, 1897

%	f.t.	%	f.t.
0	-5.96	4.99	-9.56
0.44	-6.34	6.38	-10.48
1.24	-6.92	8.10	-11.48
2.01	-7.49	10.47	-12.68
2.76	-8.04	14.83	-14.90
3.38	-8.44		

Osipov, Panina and Lempert, 1955

mol %	η	ϵ
	20°	
0	390	7
20	370	8
40	345	9
60	340	11
80	360	14
100	400	18.5

Aniline (C_6H_7N) + Sec Butyl Alcohol ($C_4H_{10}O$)

Roland, 1928

mol %	p	mol %	p
	20.36°		
100	12.6	40.10	9.3
76.47	12.1	26.93	7.9
50.75	10.3	11.65	5.3
	30.02°		
100	24.4	39.63	16.6
76.18	21.7	26.57	14.1
50.33	18.4	11.51	9.0
	39.85°		
100	44.9	38.87	28.6
75.77	37.6	25.99	23.4
49.60	31.6	11.28	15.7

Veltmans, 1926

%	d	(α) _D
	20°	
0	1.0219	0
15	0.9842	2.20
40	0.9277	5.41
60	0.8840	7.93
79.7	0.8441	10.60
100	0.8069	13.87

Aniline (C_6H_7N) + Octyl Alcohol ($C_8H_{18}O$)

Tscharler, Richter and Wettig, 1949

mol %	f.t.	mol %	f.t.
100	-16.8	36.6	-16.3
87.9	-19.6	28	-14.9
79	-23.3	18.8	-13.0
59.9	-22.8	8.8	-10.6
50.5	-19.7	0	-6.3

Aniline (C_6H_7N) (b.t. = 184.35) + Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Heptyl alcohol	$C_7H_{16}O$	176.15	78	175.4	-3.8 (78%)
Octyl alcohol	$C_8H_{18}O$	195.2	17	183.95	-2.5 (13%)
Isooctyl alcohol	$C_8H_{18}O$	180.4	65	179.0	-4.6 (64%)
Glycol	$C_2H_6O_2$	197.4	24	180.55	-0.6 (10%)
Propylen glycol	$C_3H_8O_2$	187.8	55	179.5	
Pinacol	$C_6H_{14}O_2$	174.35	90	172.0	
Ethanol amine	C_2H_7ON	170.8		170.3	+2.7 (51%)

Aniline (C_6H_7N) + Methyl Malate ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.817	-10.04	-12.75	-15.86	-19.47	-21.18	-22.48
24.9035	-14.25	-17.06	-21.56	-26.10	-28.58	-
12.4543	-16.06	-18.95	-23.85	-29.55	-32.28	-
4.902	-18.16	-21.62	-28.36	-33.25	-38.35	-43.04
2.451	-19.18	-22.44	-29.38	-34.27	-39.58	-

Aniline (C_6H_7N) + Ethyl Tartrate ($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	d	(α) _D
	0 %	
15.1	1.0262	-
20	1.0221	-
20.6	1.0215	-
25.1	1.0176	-
	7.66 %	
17.2	1.0373	38.22
20	1.0346	37.65
34.7	1.0217	36.47
59.3	1.0002	35.26
70.7	0.9903	33.34
	23.98 %	
12.7	1.070	36.27
14.6	1.0681	35.93
20	1.0630	35.24
38.1	1.0468	33.45
55.6	1.0305	31.18
81.8	1.0068	29.42
	66.29 %	
12.2	1.1475	22.08
12.6	1.1472	22.04
20	1.1400	21.82
43.2	1.1182	21.29
75.2	1.0872	20.75
85.1	1.0767	20.60
	100 %	
16.8	1.2087	-
20.1	-	7.67
33.7	-	9.10
37.2	1.1878	-
37.6	-	9.56
46.1	-	10.24
46.8	1.1783	-
55.1	-	10.94
58.3	1.1665	-
67.2	-	11.75
68.1	1.1566	-

Aniline (C_6H_7N) + Cyclohexanol ($C_6H_{12}O$)

Wheeler and Jones, 1952

%	n _D	%	n _D
0	1.46472	25° 59.22	1.52685
9.85	1.47468	70.87	1.54092
19.62	1.48463	79.01	1.55169
29.55	1.49479	91.34	1.57011
40.60	1.50649	100	1.58311
49.56	1.51612		

Aniline (C_6H_7N) + Benzyl Alcohol (C_7H_8O)

Ampola and Rimatori, 1897

%	f.t.	%	f.t.
0	-5.96	7.07	-9.26
0.74	-6.36	8.91	-10.38
2.41	-7.22	14.23	-12.58
3.81	-7.98	16.03	-14.76

Aniline (C_6H_7N) + Furfuryl Alcohol ($C_5H_6O_2$)

Hough, Mason and Sage, 1951

%	10°	20°	d 30°	40°	50°
0	-	-	-	1.006	0.9966
10	1.043	1.034	1.025	1.016	1.007
20	1.054	1.045	1.036	1.027	1.017
30	1.065	1.056	1.046	1.038	1.028
40	1.076	1.066	1.057	1.048	1.038
50	1.086	1.077	1.068	1.059	1.049
60	1.097	1.088	1.078	1.069	1.060
70	1.108	1.099	1.090	1.080	1.071
80	1.120	1.110	1.101	1.091	1.082
90	1.131	1.122	1.112	1.102	1.093
100	-	-	1.124	1.114	1.105

%	60°	70°	d 80°	90°
0	0.9874	0.9785	0.9692	0.9602
10	0.9976	0.9885	0.9794	0.9704
20	1.007	0.9989	0.9898	0.9808
30	1.019	1.009	1.000	0.9909
40	1.029	1.020	1.010	1.001
50	1.039	1.030	1.020	1.011
60	1.050	1.040	1.031	1.021
70	1.061	1.051	1.042	1.038
80	1.072	1.062	1.053	1.044
90	1.084	1.074	1.064	1.055
100	1.095	-	-	-

%	n ₅₈₉₃	%	n ₅₈₉₃
		25°	
0.00	1.5832	62.48	1.5219
21.84	1.5631	82.13	1.5023
42.47	1.5433	100.00	1.4835

%	40°	60°	U 80°	100°	120°
0	0.503	0.511	0.520	0.528	0.536
10	.502	.511	.520	.529	.537
20	.501	.511	.521	.530	.539
30	.501	.512	.522	.531	-
40	.501	.512	.523	.533	-
50	.501	.512	.524	.536	-
60	.501	.513	.526	.538	-
70	.501	.514	.528	.542	-
80	.501	.516	.531	.547	-
90	.501	.517	-	-	-
100	.501	.519	-	-	-

Methylaniline (C_7H_9N) (b.t.=196.25) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix
Octyl alcohol	$C_8H_{18}O$	195.2	55	193.0	-4.5 (57%)
Glycol	$C_2H_6O_2$	197.4	40.2	181.6	-
Propylen glycol	$C_3H_8O_2$	187.8	46	181.0	-
Methoxy diglycol	$C_5H_{12}O_3$	192.95	60	190.0	0 (80%)
Linalool	$C_{10}H_{18}O$	198.6	30	195.6	-
Benzyl alcohol	C_7H_8O	205.25	30	195.8	-
Ethanol amine	C_2H_7ON	170.8	70	167.5	-

Methylaniline (C_7H_9N) + Glycerol ($C_3H_8O_3$)

Parvatiker and Mc Ewen, 1924

%	sat. t.	%	sat. t.
10.50	197.5	48.44	223.5
26.50	220.0	59.40	222.5
33.58	223.0	69.74	219.0
40.52	224.5	85.40	190.5

Methylaniline (C_7H_9N) + Methyl Malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)				
		red	yellow	green	pale blue	dark blue viol.
20°						
49.438	-6.47	-8.10	-9.61	-10.92	-11.93	-12.74
24.719	-9.22	-11.49	-12.95	-14.73	-15.93	-
12.3595	-10.92	-13.92	-17.07	-19.93	-19.93	-
5.017	-13.35	-16.94	-20.73	-22.92	-24.92	-27.11
2.5085	-14.75	-17.54	-21.53	-23.92	-27.11	-

Methylaniline (C_7H_9N) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	d	(α) _D
9.936 %		
14.9	1.0069	23.87
20	1.0036	23.65
31.7	0.9938	23.10
49.8	0.9787	22.73
65	0.9662	22.57
30.89 %		
20	1.0445	17.57
19.4	1.0450	17.53
15.4	1.0481	17.42
15.3	1.0486	17.37

For 100 % see : Aniline + Ethyl Tartrate

Dimethylaniline ($C_8H_{11}N$) + Methyl Alcohol
(CH_4O)

Weissenberger, Schuster and Lielacher, 1947

mol %	p	Q _{mix}	mol %	p	Q _{mix}
20°					
100	96.0		50	79.3	-244
90	88.0	-46	40	78.4	-232
80	82.3	-118	30	72.6	-194
70	79.3	-182	20	64.5	-140
60	78.6	-230	10	46.5	-71

Ampola and Rimatori, 1871, 1896

%	f. t.	%	f. t.
0	+1.96	6.44	-1.66
0.43	1.33	8.02	-1.98
1.17	0.56	10.33	-2.43
2.19	-0.16	14.76	-3.02
3.40	-0.74	20.90	-3.60
4.51	-1.125	31.11	-4.405
5.44	-1.40		

Dimethylaniline ($C_8H_{11}N$) + Isobutyl Alcohol
($C_4H_{10}O$)

Ampola and Rimatori, 1896, 1897

%	f. t.	%	f. t.
0	+1.96	10.74	-1.74
0.45	1.60	13.74	-2.28
1.18	1.14	17.03	-2.74
1.91	0.76	20.94	-3.33
2.61	0.44	25.05	-3.82
3.48	-0.02	28.34	-4.16
5.07	-0.44	31.41	-4.48
7.39	-1.02		

 Dimethylaniline ($C_8H_{11}N$) + Trimethylcarbinol
($C_4H_{10}O$)

Ampola and Rimatori, 1887, 1896

%	f. t.	%	f. t.
0	+1.96	6.82	-1.07
0.34	1.76	8.72	-1.56
0.95	1.31	12.22	-2.40
1.90	0.79	19.25	-3.74
2.98	0.28	26.43	-4.34
3.34	-0.56	31.93	-4.46

 Dimethylaniline ($C_8H_{11}N$) (b. t. = 194.05)
+ Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Capryl alcohol	$C_8H_{18}O$	195.2	49.5	191.75	-4.0 (50%)
Glycol	$C_2H_6O_2$	197.4	33.5	175.85	
Propylen glycol	$C_3H_8O_2$	187.8	45	177.0	
Pinacol	$C_6H_{14}O_2$	174.35	60	169.5	
Methoxy diglycol	$C_5H_{12}O_3$	192.95	49	184.85	-0.7 (61%)
Ethoxydi glycol	$C_6H_{14}O_3$	201.9	10	193.0	
Linalool	$C_{10}H_{18}O$	198.6	15	193.9	-1.0
Benzyl alcohol	C_7H_8O	205.25	6.5	193.9	-1.0 (9%)
Ethanol amine	C_2H_7ON	170.8	55	163.5	
Diethyl-ethanolamine	$C_6H_{15}ON$	162.2	58	160.5	

 Dimethylaniline ($C_8H_{11}N$) + Capryl Alcohol
($C_8H_{18}O$)

Ampola and Rimatori, 1887, 1896

%	f. t.	%	f. t.
0	+1.96	9.68	-1.50
0.46	1.70	12.74	-2.36
1.30	1.305	18.63	-4.06
2.59	0.82	23.53	-5.43
4.00	0.30	27.65	-6.585
5.53	-0.21	30.62	-7.62
7.51	-0.86		

 Dimethylaniline ($C_8H_{11}N$) + Glycerol ($C_3H_8O_3$)

Parvatiker and McEwen, 1924

%	sat. t.	%	sat. t.
7.60	197.5	49.94	287.0
14.0	245.0	64.32	354.0
31.98	282.0	78.29	273.0
41.46	286.0	90.82	218.5

 Dimethylaniline ($C_8H_{11}N$) + Glycerol diethyl ether ($C_7H_{16}O_3$)

Ampola and Rimatori, 1887, 1896

%	f. t.	%	f. t.
0	+1.96	14.35	-1.905
0.50	1.76	17.36	-2.62
1.20	1.52	20.25	-3.29
2.23	1.17	28.03	-5.19
2.92	0.93	30.77	-6.06
4.72	0.35	33.26	-6.77
6.65	-0.08	35.87	-7.48
8.87	-0.63	38.05	-8.16
11.55	-1.28		

 Dimethylaniline ($C_8H_{11}N$) + Methyl Malate I
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc			(α)				
	red	yellow	green	pale blue	dark blue	viol.	
							20°
50.207	-5.94	-7.23	-8.17	-9.34	-9.92	-10.36	
25.1035	-5.82	-6.97	-7.93	-9.12	-9.72	-	
12.5518	-5.74	-6.85	-7.65	-8.92	-9.40	-	
5.014	-6.58	-7.93	-8.78	-9.97	-10.97	-11.77	
2.507	-6.78	-8.33	-9.17	-10.37	-11.17	-	

Dimethylaniline ($C_8H_{11}N$) + Ethyl Tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	d	(α) _D
	9.4 %	
16.4	0.9774	3.08
20	0.9744	4.20
26.6	0.9687	5.63
43	0.9548	7.76
33.9	0.9625	6.58
19.3	0.975	3.72
	24.84 %	
15.6	1.0100	4.564
20	1.0061	5.150
30.9	0.9963	6.595
47.3	0.9816	8.503
50.9	0.9785	9.404

For 100 % , see : Aniline + Ethyl Tartrate .

Dimethylaniline ($C_8H_{11}N$) + Benzyl Alcohol
(C_7H_8O)

Ampola and Rimatori, 1896, 1897

%	f.t.	%	f.t.
0	+1.96	11.95	-2.32
0.69	+1.60	14.75	-3.10
1.85	+1.08	18.00	-3.98
3.94	+0.22	21.58	-5.02
6.52	-0.68	25.91	-6.26
8.83	-1.395	29.13	-7.60

Dimethylaniline ($C_8H_{11}N$) + Benzhydrol ($C_{12}H_{12}O$)

Schmidlin and Lang, 1912

%	f.t.	%	f.t.
100	66	40	20
90	59.5	30	9.5
80	53	19	-7 E.
70	46	10	-2
60	38	0	+2
50	30		

Ethylaniline ($C_8H_{11}N$) (b.t.=205.5) + Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Pt. mix. of sat. t.
Octyl alcohol	$C_8H_{18}O$	295.2	85	194.9	-4.3 (50%)
Glycol	$C_2H_6O_2$	197.4	43	183.7	126.5
Benzyl alcohol	C_7H_8O	205.25	50	202.8	-3.8
Ethanol amine	C_2H_7ON	170.8	-	170.0	-

Ethylaniline ($C_8H_{11}N$) + Methyl Malate I
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc		(α)					
		red	yellow	green	pale blue	dark blue	viol.
20°							
50.093	-6.39	-7.59	-9.18	-11.28	-12.08	-12.78	
25.0465	-8.46	-10.38	-12.54	-14.81	-15.29	-	
12.5233	-10.78	-13.89	-16.29	-18.77	-19.56	-	
5.047	-12.48	-17.44	-20.60	-23.58	-25.16	-26.95	
2.5235	-14.27	-18.62	-22.19	-25.76	-27.74	-	

Diethylaniline ($C_{10}H_{15}N$) + Isoamyl Alcohol
($C_5H_{12}O$)

Drucker and Kassel, 1911

%	d	η
76.5°		
100	0.7656	951
90.02	0.7764	-
70.00	0.7995	784
50.08	0.8218	723
30.15	0.8473	709
10.07	0.8741	725
0.0	0.8901	783
0°		
100	0.8253	8834
90.03	0.8367	7564
70.52	0.8586	5698
50.08	0.8834	4519
30.52	0.9091	3821
10.00	0.9307	3600
0.0	0.9504	3838

Diethylaniline ($C_{10}H_{15}N$) + Methyl Malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
			20°			
50.072	-5.19	-6.27	-7.37	-8.09	-8.49	-8.69
25.036	-4.63	-5.95	-6.55	-7.19	-7.63	-
12.518	-4.15	-5.19	-5.91	-5.91	-5.59	-
4.897	-3.06	-4.70	-5.31	-4.90	-4.29	-3.68
2.4485	-2.45	-4.08	-4.08	-3.27	-2.86	-

Diethylaniline ($C_{10}H_{15}N$) (b.t.=217.05) + Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	33	183.4	-
Ethoxy-diglycol	$C_6H_{14}O_3$	201.9	85	200.5	-
Borneol	$C_{10}H_{18}O$	215.0	80	214.8	-
l-Terpineol	"	218.85	44	215.5	-4.2 (50%)
Menthol	$C_{10}H_{20}O$	216.3	56.5	215.3	
Benzyl-alcohol	C_7H_8O	205.25	72	204.2	-1.6 (70%)
Phenyl-ethanol	$C_8H_{10}O$	219.4	40	213.95	-2.5 (50%)
Phenyl propanol	$C_9H_{12}O$	235.6	7	216.9	-0.5 (5%)
Ethanol amine	C_2H_7ON	170.8	82	169.0	

O-Toluidine (C_7H_7N) + Ethyl Alcohol (C_2H_6O)
Hatem, 1949

mol %	d				
	18°	20°	25°	30°	35°
0	0.9996	0.9980	0.9937	0.9896	0.9857
2.714	.9980	.9963	.9923	.9883	.9844
5.583	.9940	.9925	.9884	.9846	.9803
10.18	.9892	.9877	.9840	.9802	.9764
49.45	.9365	.9350	.9306	.9264	.9222
73.109	.8858	.8843	.8800	.8757	.8715
87.478	.8547	.8629	.8583	.8540	.8494
97.68	.8012	.7914	.7950	.7904	.7860
98.9	.7960	.7942	.7900	.7855	.7812
99.40	.7947	.7930	.7886	.7843	.7800

mol %	18°	20°	n_D^{25}	30°	35°
0	1.5752	1.5738	1.5705	1.5679	1.5653
2.714	.5723	.5710	.5678	.5650	.5625
5.583	.5690	.5678	.5643	.5615	.5595
10.18	.5638	.5620	.5594	.5572	.5556
49.45	.5062	.5047	.5010	.4884	.4865
73.109	.4532	.4515	.4483	.4468	.4427
87.478	.4109	.4092	.4050	.4033	.4013
97.68	.3728	.3715	.3688	.3665	.3645
98.9	.3680	.3665	.3635	.3617	.3602
99.40	.3660	.3645	.3618	.3598	.3584

%	η	χ
	20°	
0	4300	-0.692
2	4040	-
4	3860	-
6	3720	-0.710
8	3690	-
20	2840	-0.748
40	2060	-0.763
60	1600	-0.742
80	1340	-0.718
92	1230	-
94	1230	-
96	1220	-0.723
98	1200	-0.733
100	1200	-0.743

o-Toluidine (C_7H_7N) (b.t.=200.35) + Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Dt mix
Octyl alcohol	$C_8H_{18}O$	195.2	77	194.7	-2.4 (50%)
Glycol	$C_2H_6O_2$	197.4	42.5	186.45	-2.4 (56%)
Linalool	$C_{10}H_{18}O$	198.6	70	198.3	-1.5

o-Toluidine (C ₇ H ₉ N) + Glycerol (C ₃ H ₈ O ₃)					
Parvatiker and McEwen, 1924					
%	sat. t	%	sat. t		
7.80	100	53.41	154.0		
13.86	130	59.03	153.0		
26.58	150	67.96	150.0		
36.72	154	79.04	137.0		
47.47	154.4	87.58	99.2		
o-Toluidine (C ₇ H ₉ N) + Methyl malate 1 (C ₆ H ₁₀ O ₅)					
Grossmann and Landau, 1910					
g/100cc (α)					
red	yellow	green	pale blue	dark blue	viol.
20°					
50.155	- 8.07	-10.37	-12.16	-14.55	-15.85 -17.15
25.0775	- 9.97	-12.48	-14.20	-17.35	-19.22 -
12.5388	-10.93	-13.24	-14.99	-18.10	-19.94 -
5.230	-12.62	-15.11	-17.21	-21.41	-23.33 -25.81
2.615	-13.00	-15.30	-17.59	-21.80	-23.71 -
o-Toluidine (C ₇ H ₉ N) + Ethyl tartrate (C ₈ H ₁₄ O ₆)					
Patterson and Stevenson, 1912					
t	d	(α) _D			
	10.93 %				
12.6	1.0250	31.09			
20	1.0187	30.51			
28.9	1.0111	29.39			
38.2	1.0031	29.37			
47.4	0.9954	28.35			
	25.096 %				
15	1.0502	27.81			
20	1.0457	27.39			
29.4	1.0373	26.78			
45.7	1.0228	25.65			
58	1.0120	25.22			
	50.3 %				
14.9	1.1007	21.23			
20	1.0960	21.09			
34.6	1.0825	20.69			
50.5	1.0677	20.38			
For 100 %, see Aniline + Ethyl tartrate					

m-Toluidine (C ₇ H ₉ N) + Ethyl Alcohol (C ₂ H ₆ O)					
Hatem, 1949					
mol %		d			
		18°	20°	25°	30° 35°
0	0.9929	0.9907	0.9882	0.9860	0.9715
3.25	.9902	.9880	.9832	.9780	.9737
7.072	.9872	.9851	.9811	.9752	.9706
11.835	.9823	.9798	.9752	.9702	.9654
46.15	.9358	.9343	.9305	.9273	.9232
69.824	.8899	.8882	.8833	.8789	.8745
87.63	.8404	.8383	.8345	.8305	.8265
95.536	.8002	.7981	.7962	.7902	.7865
97.54	.7963	.7944	.7905	.7863	.7822
99.395	.7935	.7920	.7875	.7835	.7798
mol %		n _D			
		18°	20°	25°	30° 35°
0	1.5726	1.5711	1.5675	1.5644	1.5613
3.25	.5678	.5655	.5633	.5603	.5577
7.072	.5637	.5625	.5593	.5561	.5531
11.835	.5580	.5570	.5541	.5511	.5483
46.15	.5099	.5087	.5063	.5038	.5015
69.824	.4090	.4080	.4052	.4028	.4006
87.63	.4080	.4069	.4043	.4022	.4002
95.536	.3715	.3706	.3685	.3670	.3654
97.54	.3670	.3660	.3637	.3615	.3602
99.395	.3631	.3620	.3599	.3582	.3570
%		η		χ	
20°					
0		3910		-0.664	
5		3500		-	
6		-		-0.678	
10		3210		-	
20		2700		-0.687	
40		2040		-0.695	
60		1600		-0.698	
80		1300		-0.700	
90		1240		-	
92		-		-0.708	
96		1200		-0.714	
98		1200		-	
100		1200		-0.734	
m-Toluidine (C ₇ H ₉ N) + Glycol (C ₂ H ₆ O ₂)					
Lecat, 1949					
%	b. t.	Dt mix			
0	203.1				
42	198.55 Az				
50	-				
100	197.4				+2.5

m-Toluidine (C ₇ H ₉ N) + Glycerol (C ₃ H ₈ O ₃)						
Parvatiker and McEwen,1924						
%	higher sat.t.	%	higher sat.t.			
16.77	89	46.90	120.2			
20.77	102	54.32	119.5			
28.42	113.5	63.13	117.5			
35.50	119.4	82.29	88.5			
41.32	120.5					
%	lowersat.t.	%	lower sat.t.			
16.38	66.6	68.60	9.2			
33.96	92.2	78.32	14.2			
37.14	93.0	81.28	16.8			
51.20	93.3	86.01	23			
59.01	91.8					
m-Toluidine (C ₇ H ₉ N) + Methyl Malate 1 (C ₆ H ₁₀ O ₅)						
Grossmann and Landau,1910						
g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.078	-9.88	-12.38	-15.08	-18.47	-20.07	-21.47
25.039	-14.38	-19.57	-22.37	-27.56	-30.55	-
12.5195	-17.17	-21.81	-24.52	-30.19	-32.67	-
4.817	-19.31	-23.87	-27.61	-34.25	-37.78	-43.60
2.4085	-19.93	-24.08	-28.23	-34.46	-38.20	-
m-Toluidine (C ₇ H ₉ N) + Ethyl Tartrate (C ₈ H ₁₄ O ₆)						
Patterson and Stevenson,1912						
t	d	(α) _D				
	11.65 %					
15.5	1.0154	49.47				
20	1.0117	49.49				
29.7	1.0033	48.60				
43.2	0.9920	42.63				
	24.964 %					
16.3	1.0407	43.40				
20	1.0376	42.40				
32.9	1.0267	39.36				
48	1.0140	36.38				
64.3	1.0005	33.42				
For 100 %,see : Aniline + Ethyl Tartrate						

p-Toluidine (C ₇ H ₉ N) + Ethyl Alcohol (C ₂ H ₆ O)					
Perkin,1896					
mol %	d				
	10°	15°	20°	25°	
66.7	0.9038	0.9000	0.8958	0.8916	
100	-	0.7943	-	-	
mol %	(α) _D ^{mol}				
	15°				
0	16.347				
65.7	21.023				
Speyers,1902					
mol %	f.t.	mol %	f.t.		
79.28	0.0	49.10	22.1		
66.12	11.7				
t	d sat. sol.	t	d sat. sol.		
0.0	0.8884	28.4	0.9458		
15.6	0.9168	40.6	0.9636		
Hatem,1949					
mol %	d				
	18°	20°	25°	30°	35°
23.63	0.8727	0.8706	0.8657	0.8620	0.8582
13.05	.8430	.8408	.8367	.8328	.8293
5.66	.8157	.8115	.8090	.8051	.8012
0.57	.7945	.7945	.7880	.7840	.7801
mol %	n _D				
	18°	20°	25°	30°	35°
23.63	1.4408	1.4387	1.4372	1.4351	1.4328
13.05	.4103	.4092	.4067	.4041	.4017
5.66	.3844	.3832	.3810	.3790	.3770
0.57	.3649	.3640	.3619	.3599	.3578
%	η				
	χ				
20°					
0	-				
48	2050				
60	1700				
80	1400				
92	1260				
94	1240				
96	1230				
98	1220				
100	1220				
	-0.743				

p-Toluidine (C_7H_9N) + Trimethylcarbinol
($C_4H_{10}O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
0	43.5	-	52.1	14	-
8.4	38	-	53.4	13.5	-
10.2	36.3	-	55.3	13	-
15.0	33.5	-	55.6	12.8	-
19.1	31.5	-	57.3	11.5	5.1
24.5	28.5	-	58.4	11	-
26.9	28	-	59.4	10.3	5.1
30.1	25.8	-	60.5	9	5
34.3	23.9	-	61.8	9	5.1
34.8	23.5	-	64.1	7.8	5.1
39.5	21	-	64.5	-	5
40.1	20.5	5.1	67.8	5.9	5.1
41.5	20	-	71.6	5.5	5
44.8	18	-	75.7	8.5	-
47.0	16	-	82.4	11.5	-
47.2	16.7	-	89.7	15.5	5
50.3	15	-	95.5	19.5	-
51.6	14.5	-	100	23.1	-

p-Toluidine (C_7H_9N) + Octyl Alcohol ($C_8H_{18}O$)

Lecat, 1949

% b. t.

0	200.55
77	194.65 Az
100	195.2

p-Toluidine (C_7H_9N) + Menthol ($C_{10}H_{20}O$)

Pawlewski, 1899

mol %	f. t.	mol %	f. t.
0	45.0	56.04	19.9
6.95	42.6	58.69	20.5
10.78	41.2	67.08	25.0
17.02	33.8	73.24	27.9
18.58	38.3	79.07	31.0
40.66	29.5	87.37	34.7
46.04	26	92.97	38.5
53.74	21.7	100	43.0

p-Toluidine (C_7H_9N) + Glycol ($C_2H_6O_2$)

Lecat, 1949

% b. t.

0	200.55
37	187.0 Az
100	197.4

p-Toluidine (C_7H_9N) + Ethyl Tartrate ($C_8H_{14}O_6$)
Patterson and Stevenson, 1912

t	d	(α) _D
24.925 %		
20	1.035	42.45
35.7	1.0217	39.45
46.8	1.0126	37.69
57.7	1.0035	35.37
67.8	0.995	33.59
49.98 %		
16.8	1.0920	31.73
20	1.0890	31.39
34.7	1.0755	29.79
46.3	1.0647	28.57
58.2	1.0537	27.48

For 100 % , see : Aniline + Ethyl Tartrate

p-Toluidine (C_7H_9N) + Triphenylcarbinol
($C_{19}H_{15}O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
0	43	-	51.6	93.2	-
7.5	41.4	36.2	54.0	98.1	36.2
13.2	39.9	-	54.4	98	-
24.7	37.2	-	57.3	103	-
28.5	40	36.2	61.5	109.1	36.2
36.5	62	36.2	66.6	117.4	-
38.9	69	-	71.8	125	-
42.0	75	36.2	76.1	131.1	-
43.4	78	-	80.9	136.3	-
45.2	82.2	36.2	86.0	143.3	-
45.9	84.1	36.2	89.8	147.2	-
48.8	89	36.2	94.8	154	-
48.8	90.1	-	100	159.2	-

p-Dimethyltoluidine ($C_9H_{13}N$) (b. t. = 210.2)
+ Alcohols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Glycol	$C_2H_6O_2$	197.4	47	182.0
Propylen glycol	$C_3H_8O_2$	187.8	60	178.0
Ethoxy diglycol	$C_6H_{14}O_3$	201.9	-	199.5
Benzyl alcohol	C_7H_8O	205.25	58	202.8
Benzyl carbinol	$C_8H_{10}O$	219.4	30	208.5
Ethanol amine	C_2H_7ON	170.8	75	169.0

o-Dimethyltoluidine ($C_9H_{11}N$) (b.t.=185.3)
+ Alcohols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b. t.	%	b. t.	Dt mix
Heptyl alcohol	$C_7H_{16}O$	176.15	82	175.5	-0.7 (90%)
Octyl alcohol	$C_8H_{18}O$	195.2	20	184.8	-2.0
Iso octyl alcohol	$C_8H_{18}O$	180.4	70	179.0	-2.2
Glycol	$C_2H_6O_2$	197.4	23	169.3	
Propylen glycol	$C_3H_8O_2$	187.8	37	174.0	
Butoxy glycol	$C_6H_{14}O_2$	171.15	88	170.95	
Methoxy diglycol	$C_5H_{12}O_3$	192.95	18	183.0	
Benzyl alcohol	C_7H_8O	205.25	7	185.2	-0.6 (5%)
Ethanol amine	C_2H_7ON	170.8	50	161.0	

o-Xylidine ($C_8H_{11}N$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.
0	225.5
-	189.0 Az
100	197.4

o-Xylidine ($C_8H_{11}N$) + Citronellol ($C_{10}H_{20}O$)

Lecat, 1949

%	b. t.
0	225.5
60	223.5 Az
100	224.4

m-Xylidine ($C_8H_{11}N$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.
0	214.0
43	288.0 Az
100	197.4

m-Xylidine ($C_8H_{11}N$) + Menthol ($C_{10}H_{20}O$)

Lecat, 1949

%	b. t.
0	214.0
30	213.5 Az
100	216.3

m- xylidine ($C_8H_{11}N$) + 2,4-xyleneol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	20	48.5	36.3
90	10	40	34
84	5.5	30	25.5
80	11	20	15
70	25.5	15	8
60	34	10	2.5
50	36	(1+1) 0	10

m- xylidine ($C_8H_{11}N$) + 2,6-xyleneol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	45	50	22
90	40	40	20.5
80	32	30	15.5
70	20	20	5.0
60	10.5	10	3
50.2	21.9	(1+1) 0	9.5

m- xylidine ($C_8H_{11}N$) + 3,4-xyleneol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	63	50	18
90	57	40	10.5
80	47	30	0
70	35	20	-12
66.6	16	10	0.5
60	24	(1+1) 0	10

m- xylidine ($C_8H_{11}N$) + 3,5-xyleneol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f.t.	%	f.t.
100	64.5	50	40
90	58	40	37.5
80	50	30	34.5
70	35.5	20	29
65	39	10	19.5
60	39.8	0	10.5
56	40.1		

 α -Phenylethylamine d ($C_8H_{11}N$) + Methyl Alcohol (CH_3O)

Leithe, 1929

%	d^{15}	%	$(\alpha)_D^{15}$
100	0.9561	100	40.67
30.49	.8541	26.04	29.0
13.89	.8222	11.42	28.7
8.14	.8113	6.60	28.5

o-Phenylendiamine ($C_6H_8N_2$) + Trimethylcarbinol ($C_4H_{10}O$)

Kremann and Wek, 1919

%	f.t.	E
100	23	-
94.5	27.2	21
90.6	36.2	21
85.7	45	21
82.6	51.5	-
79.7	53	-
73.4	64	21
71.9	65	-
64.9	70.5	-
64.3	71	-
59.5	74 (?)	-
59.4	73.5	21
51.5	76.5	-
43.4	80	-
30.0	84	21
17.5	89	-
7.8	96.1	-
0	101.1	-

o-Phenylenediamine ($C_6H_8N_2$) + Erythritol ($C_4H_{10}O_4$)

Pushin and Dezelic, 1932

mol %	f.t.	E
100	118	-
90	114.5	-
80	112	89
70	109	90
60	106.5	92
50	103.5	"
40	99.7	"
30	95	"
25	92	"
20	94	"
10	97.5	-
0	102	-

o-Phenylenediamine ($C_6H_8N_2$) + Benzhydrol ($C_{12}H_{12}O$)

Kremann and Drazil, 1915

%	f.t.	E
100	64.5	-
92.1	59	-
82.0	50	47
76.0	52	47
68.6	62.5	-
62.8	69	-
56.2	74.8	-
46.5	82.5	-
40.6	86	-
35.7	88.5	47
25.7	93.5	-
16.8	97	-
6.4	100.5	-
0.0	102.5	-

m-Phenylenediamine ($C_6H_8N_2$) + Trimethyl carbinol ($C_4H_{10}O$)

Kremann and Wlk, 1919

%	f.t.	E
100	23	-
92.8	21.5	21.5
84.7	32.8	-
80.9	37.3	-
75.8	40.5	-
68.9	42.5	-
64.1	43.5	-
58.8	44.5	-
54.7	44.9	-
50.6	45	-
46.2	45.5	21.2
41.4	46	-
39.6	46.2	-
34.2	46.8	-
30.4	47.2	-
24.3	48.5	-
19.2	49.8	21.3
15.3	51.2	-
9.5	53.8	-
5.3	56.5	-
0	60.5	-

m-Phenylenediamine ($C_6H_8N_2$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f.t.	%	f.t.
100	159.5	43.8	105.5
96.7	155.0	40.9	104.0
93.1	151.0	36.8	100.0
87.9	146.0	32.5	95.5
81.9	139.0	24.7	87.0
76.1	134.0	18.5	78.0
69.7	125.5	14.2	70.0
63.5	122.5	9.5	59.6
56.3	116.5	4.2	61.0
50.9	111.5	0	62.0

p-Phenylenediamine ($C_6H_8N_2$) + Erythritol
($C_4H_{10}O_4$)

Pushin and Dezelic, 1932

mol %	f.t.	E
100	118	-
90	114	-
80	110.5	103
70	107	102
60	103	103
50	108.5	103
40	114.5	102
30	121	90
20	127.5	77
10	133	-
0	140	-

p-Phenylenediamine ($C_6H_8N_2$) + Menthol
($C_{10}H_{20}O$)

Puschin and Dezelic, 1938

mol %	f.t.	E	min.
0	140	-	-
10	137.5	-	-
20	135	39	-
30	133	39	-
40	130.5	39	-
50	128.5	40	1.0
60	127	40	1.3
70	120	40	1.4
80	107	41	1.6
90	85.5	41	2.3
100	42	-	-

p-Phenylenediamine ($C_6H_8N_2$) + Benzhydrol
($C_{13}H_{12}O$)

Kremann and Drazil, 1915

%	f.t.	E
100	64.5	-
90.9	55	-
87.7	60	-
79.3	81.5	51
70.8	95	51
62.4	104.5	-
57.2	109.5	-
48.3	116.5	-
36.7	124.5	-
26.4	131.5	-
18.4	136	-
10.8	140	-
0.0	147	-

p-Phenylenediamine ($C_6H_8N_2$) + Triphenyl carbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f.t.	%	f.t.
100	159.5	59.7	121.0
96.3	156.0	55.1	122.5
93.1	151.0	51.0	124.0
90.3	146.0	39.8	128.0
86.1	141.0	34.4	129.5
82.8	137.5	32.4	130.5
79.3	133.0	22.2	133.0
74.0	127.0	17.1	134.5
70.2	121.0	12.2	136.0
66.5	118.0	7.3	137.5
64.1	119.0	0	140.0

Benzylethylamine ($C_9H_{13}N$) + Glycerol ($C_3H_8O_3$)

Parvatiker and Mc Ewen, 1924

%	sat. t.	
	lower	higher
12.15	85	144
17.50	71	253
23.90	63	277
45.11	51	281
59.94	50.1	274
75.52	50.0	267
81.93	50.0	251
89.86	61	177

Benzylaniline ($C_{13}H_{13}N$) + Benzoin ($C_{14}H_{12}O_2$)

Vanstone, 1909

mol %	f. t.	E
0	34.2	-
2.87	32.2	-
13.28	68.4	32.4
35.84	99.8	32.4
46.78	106.6	32.4
61.75	118.0	32.4
70.91	119.8	32.4
78.85	123.6	-
100	132.7	-

Benzylidenaniline ($C_{13}H_{11}N$) + Benzoin ($C_{14}H_{12}O_2$)

Vanstone, 1909

mol %	f. t.	E
0	49.8	-
12.55	63.8	48.0
23.98	84.1	49.0
31.87	94.1	-
43.75	103.8	-
54.97	110.0	-
69.22	118.4	-
80.84	124.0	-
87.21	129.3	-
100	133.0	-

Diphenylamine ($C_{12}H_{11}N$) + Ethyl Alcohol (C_2H_6O)

Raoult, 1890

mol %	($p_2 - p$)/ $p_2 \cdot 100$
98.567	1.45
96.368	3.617
93.666	5.688

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f. t.	$\sigma_1 - \sigma$
		60°
0	-52.8	-
10	-48.1	0.3
20	-44.9	0.8
30	-41.6	2.8
40	-40.5	5.0
50	-38.8	8.7
60	-37.1	11.2
70	-35.2	13.7
80	-32.1	14.9
90	-22.1	16.8

Campetti, 1914

t	U
	0%
56	0.4423
54	0.4385
	16.67 %
50.90	0.4987
55.97	0.5017
	42.47 %
50.7	0.5571
53.7	0.5849
56.0	0.6002
	100 %
40	0.6393
58	0.7024

Diphenylamine ($C_{12}H_{11}N$) + Isopropyl Alcohol (C_3H_8O)

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f. t.	$\sigma_1 - \sigma$
		60°
0	52.8	-
10	47.7	0.6
20	44.2	2.1
30	41.4	4.5
40	39.0	7.0
50	36.9	10.1
60	34.9	13.9
70	33.1	15.7
80	29.3	17.7
90	18.7	19.3

Diphenylamine ($C_{12}H_{11}N$) + Butyl Alcohol ($C_4H_{10}O$)

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f. t.	$\sigma_1 - \sigma$
		60°
0	52.8	-
10	48.3	3.7
20	44.8	5.0
30	42.0	8.2
40	39.6	10.0
50	37.2	11.3
60	34.9	12.8
70	31.2	14.2
80	24.4	15.3
90	10.3	16.7

Diphenylamine ($C_{12}H_{11}N$) + Isobutyl Alcohol
($C_4H_{10}O$)

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f.t.	$\sigma_1 - \sigma$
60°		
0	52.8	-
10	48.1	2.9
20	44.6	6.0
30	41.8	9.3
40	39.5	11.9
50	37.7	13.9
60	35.7	15.0
70	34.0	16.4
80	30.3	18.2
90	20.2	19.2

Diphenylamine ($C_{12}H_{11}N$) + Isoamyl Alcohol
($C_5H_{12}O$)

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f.t.	$\sigma_1 - \sigma$
60°		
0	52.8	-
2.5	51.50	0.2
5.0	50.25	1.9
7.5	49.05	3.2
10	47.8	5.1
20	44.2	7.9
30	41.8	10.4
40	39.6	11.4
50	37.6	12.8
60	34.9	14.1
70	32.8	15.6
80	27.6	15.9
90	12.3	17.7

Diphenylamine ($C_{12}H_{11}N$) + Octadecyl Alcohol
($C_{18}H_{38}O$)

Deviatikh, Pamfilov and Starobinets, 1948

mol %	f.t.	$\sigma_1 - \sigma$
60°		
0	52.8	-
1	52.40	0.1
2	52.00	0.9
3	51.60	2.8
4	51.20	3.2
5	50.80	4.2
6	50.45	5.0
7	50.15	5.2
8	49.90	5.3
9	49.70	5.7
10	48.50	6.7
20	48.00	8.3

Diphenylamine ($C_{12}H_{11}N$) + Cetyl Alcohol
($C_{16}H_{34}O$)

Giua and Cherchi, 1919

%	f.t.	E
0	53.10	-
8.62	50.60	-
12.78	49.75	-
18.66	48.7	-
23.92	47.9	-
27.79	47.4	-
31.71	46.85	-
35.75	46.35	-
39.07	45.9	37.8
41.69	45.45	-
45.96	44.8	38
50.59	43.8	38
53.13	43.5	38
54.05	43.2	38.2
59.13	41.9	37.8
62.08	40.95	37.8
64.83	39.95	37.7
68.91	38	37.2
72.96	38.40	37.1
76.88	39.2	37.5
80.71	40.1	-
86.63	41.7	-
90.35	43	-
95.45	44.7	-
100	46.3	-

Diphenylamine ($C_{12}H_{11}N$) + Ethyl Tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	(α) _D	t	(α) _D
66.65 %			
16.3	10.02	29.2	10.91
20	10.35	31.3	11.01
22.1	10.5	44.6	11.45

Diphenylamine ($C_{12}H_{11}N$) + Benzyl Alcohol
(C_7H_8O)

Deviatikh, Pamfilov and Starobinets, 1949

mol %	f.t.	$\sigma_1 - \sigma$
60°		
0	52.8	-
10	48.0	0.1
20	43.6	0.2
30	40.0	0.3
40	35.8	0.55
50	30.9	0.95
60	24.2	1.7
70	16.8	2.7
80	22	3.3

Methyldiphenylamine ($C_{15}H_{15}N$) + Ethyl Tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1912

t	(α) _D	t	(α) _D
69.67 %			
13.9	6.06	30.5	7.28
20	6.35	40.5	8.02
22.9	6.39		
90.09 %			
16.7	8.15	33.4	9.41
20	8.32	39	10.29
26.5	8.74		

Tetramethyl-p-Diamino-Triphenylmethylamine
($C_{25}H_{27}N_3$)
+ Tetramethyl-p-Diamino-Triphenylcarbinol
($C_{25}H_{26}ON_2$)

Grimm, Gunther and Tittus, 1931

mol %	f. t.	I	m. t.	f. t.	II	m. t.
0	110		109	122		119
10	114		110	124		123
20	117		111	126		123.5
30	120		113.5	128		123.5
40	123.5		115	-		123.5
50	126		118	-		123
60	128		120	134		123
70	130		124	135.5		123.5
80	133.5		127	136		126.5
90	135		130.5	137.5		130.5
100	137		134.5	138		136

Aniline-1-phenylethane ($C_{14}H_{15}N$)
+ Ethyl Alcohol (C_2H_6O)

Descamps, 1924

%	5893 Å	(α) _D	4358 Å
5.07	-16.35		-17.13
19.96	-13.94		-12.50
39.47	-10.56		- 5.99
66.13	- 6.14		+ 2.45
83.43	- 3.20		+ 8.59
100	- 0.12		+14.87

1-Naphthylamine ($C_{10}H_9N$) + Trimethylcarbinol
($C_4H_{10}O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
100	23	-	51.5	24.1	- (1+2)
96.0	21	-	48.6	23.5	- "
89.8	18	15	45.1	21.1	- "
82.4	15.6	- (1+6)	41.5	23.6	- "
78.2	16	- "	35.1	26	- "
72.8	16	- "	28.6	28.5	- "
68.3	15.9	- "	23.0	29.5	- "
63.5	14	14 "	15.5	33	28.5 (2+1)
59.0	19	14 (1+2)	7.8	42.5	- "
56.8	21	- "	0	48.1	- "
54.1	22.6	- "			

1-Naphthylamine ($C_{10}H_9N$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
100	159.2	-	51.0	90.5	-
93.0	152	-	38.5	58.1	38
88.4	146.5	-	36.1	48	38
83.4	140	-	29.5	40	38 (6+1)
78.5	134.1	-	27.0	40.7	37 "
70.5	124	-	20.3	41.2	37 "
63.5	113	--	16.4	40.5	37 "
30.4	107.5	-	11.2	39.2	37 "
55.4	99.2	38	5.2	37	37 "
51.7	90.5	-	0	48.1	- -

1-Naphthylamine ($C_{10}H_9N$) + Ethyl alcohol (C_2H_6O)

Campetti, 1914

t	U
0 %	
51.7	0.4736
54.7	0.4774
13.11 %	
47.8	0.5037
49.7	0.5045
52.4	0.5093
49.29 %	
46.45	0.5989
49.00	0.6096
52.02	0.6111
100 %	
40	0.6396
58	0.7024

1-Naphtylamine (C₁₀H₉N) + Benzhydrol
(C₁₃H₁₂O)

Kremann and Drazil, 1916

%	f. t.	E
100	64.5	-
93.4	60.5	-
86.2	56.5	-
77.7	51	-
68.3	44	-
61.6	38	-
55.0	32.4	-
51.5	29.5	16
39.7	19	-
33.9	19	16
21.5	31.5	16
10.1	41.	-
0.0	49	-

2-Naphtylamine (C₁₀H₉N) + Trimethylcarbinol
(C₄H₁₀O)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
stable					
0	109	-	43.9	90.9	89.8
10.1	102.7	95.5	45.9	90	95.5
11.0	102.5	"	46.3	90.1	75.5
17.5	98.5	"	46.4	89.8	89.8
20.1	95	"	49.5	91.5	95.5
25.5	95.5	"	50.1	92	75.5
27.1	94.9	"	57.0	89.8	"
32.8	95	"	58.8	85	85
33.6	95	89.8	61.4	84	75.5
34.7	94	95.5	63.0	80.5	95.5
37.8	93.8	"	67.5	76	"
38.3	93.7	"	70.8	70	"
42.0	92.7	89.8	100	23	75.5
42.2	92.1	95.5			
metastable					
50.5	91.5	18	83.1	56.2	18
55.4	90.5	"	85.8	52	"
59.7	84.9	"	84.6	50	"
62.9	88.9	"	89.2	47	"
66.7	76	"	90.5	44	-
71.4	70	"	93.8	29.5	18
76.4	65.2	"	95.5	20.5	"
78.1	63	"	100	23	"
80.2	61	"			
47.3	88	18	62.9	74.8	18
49.1	84.5	"	65.9	73	"
52.3	81.5	-	71.4	69.3	"
57.8	75.5	18			

(2+1) (1+2)

2-Naphthylamine (C₁₀H₉N) + Triphenylcarbinol
(C₁₉H₁₆O)

Kremann and Wlk, 1919

%	f. t.	E
0	109	-
4.7	107	-
10.0	105	-
11.3	104.5	-
14.7	101.9	-
17.1	101	-
20.4	99.6	-
22.4	99.1	-
26.5	97	-
31.2	95.1	-
32.2	94.3 (2+1)	91.8
37.8	91.8	"
42.1	91.7	"
45.8	92	-
48.5	91.7 (2+1)	91.8
49.2	92	-
51.0	"	-
51.5	91.8 (2+1)	91.8
53.6	92	-
53.8	91.8 (2+1)	91.8
58.1	92.9	-
58.8	-	91.8
62.1	100.9	-
67.1	111	-
71.6	119.9	-
75.9	126	-
83.6	137	-
88.6	144.2	-
95.5	154	-
100	159.2	-

2-Naphthylamine (C₁₀H₉N) + Benzhydrol (C₁₃H₁₂O)

Kremann and Drazil, 1915

%	f. t.	%	f. t.
0.0	110	59.4	76
13.8	104	65.2	68
21.9	100.5	71.4	61
28.9	96.0	79.1	51
34.5	93	86.4	56.5
40.5	88.8	93.8	61
45.2	86	100	64.5
50.6	81.5		

Pyrroline (C_4H_7N) + Propyl Alcohol (C_3H_8O)

Lecat, 1949

%	b. t.
0	90.0
-	89.0
100	97.2

Pyrrole (C_4H_5N) + Ethyl Alcohol (C_2H_6O)

Dezelicz and Belia, 1938

mol %	d	η
25°		
0	0.9419	1215
20	9147	1001
40	8843	939
60	8572	940
80	8333	981
100	7859	1140

Hatem, 1949

%	χ	%	χ
18°			
100	-0.743	40	-0.742
80	-0.728	20	-0.730
60	-0.742	0	-0.710

Pyrrole (C_4H_5N) + Isoamyl Alcohol ($C_5H_{12}O$)

Lecat, 1949

%	b. t.
0	130.0
79	129.4 Az
100	131.9

Methylpyrrole (C_5H_7N) + Butyl alcohol ($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	112.8
-	112.2 Az
100	117.8

Methylpyrrole (C_5H_7N) + Isobutyl alcohol
($C_4H_{10}O$)

Lecat, 1949

%	b. t.
0	112.8
-	107.5 Az
100	108.0

Ethylpyrrole (C_6H_9N) + Isoamyl Alcohol
($C_5H_{12}O$)

Lecat, 1949

%	b. t.
0	130.4
-	129.0 Az
100	131.9

Pyridine (C_5H_5N) + Methyl Alcohol (CH_3O)

Timofeev, 1905

%	U	%	U
10°			
0	0.405	74.4	0.609
19.2	0.460	100	0.600

Initial	%	Final	Q dil (By mole alcohol)
0		4.8	+537
4.8		9.3	+477
9.3		12.9	+441
12.9		16.4	+394
16.4		19.7	+366

(by mole pyridine)		
100	94.3	+984
94.3	89.1	+935
89.1	83.4	+867
83.4	79.4	+803
79.4	74.1	+742

Pyridine (C ₅ H ₅ N) + Ethyl Alcohol (C ₂ H ₆ O)					
Blackburn and Kipling,1953 (fig)					
mol %	P ₁	P ₂	P		
		20°			
0	16	-	16		
20	12	9	21		
28	11	11	22		
40	9	17	26		
60	7	25	32		
80	3	35	38		
100	-	44	44		
Dunstan, Thole and Hunt,1907					
%	d	%	d		
		25°			
100	0.79037	33.93	0.92418		
70.08	0.84317	20.04	0.94564		
50.03	0.88449	0	0.97832		
Holmes,1918					
%	d	%	d		
		15.5°			
0	0.9871	45.61	0.8931		
10.48	0.9642	100	0.7932		
25.92	0.9319				
Hatem,1949					
mol %	18°	20°	n _D 25°	30°	35°
0	1.5120	1.5106	1.5073	1.5043	1.5014
4.88	5070	5060	5028	4996	4963
6.72	5050	5040	5008	4978	4848
17.139	4934	4903	4898	4868	4840
41.50	4635	4624	4602	4578	4554
65.787	4292	4280	4254	4230	4206
81.09	3961	3948	3923	3897	3871
90.04	3853	3842	3820	3798	3774
96.363	3704	3694	3672	3652	3632
98.04	3668	3659	3640	3620	3598
Hatem,1949					
%	χ		%	χ	
		20°			
0	-0.597	60	-0.670		
10	-	70	-0.680		
20	-0.633	80	-0.691		
30	-0.648	90	-0.711		
40	-0.656	100	-0.743		
50	-0.660				
Hatem,1951 (fig)					
%	χ		%	χ	
		20°			
0	-0.807	80	-0.738		
20	-0.781	88	-0.734		
40	-0.761	100	-0.740		
60	-0.749				
Griffiths,1952					
%	d	%	d		
		25°			
100	0.78508	37.97	0.91182		
89.90	0.80442	30.89	0.92903		
79.07	0.82751	19.93	0.94426		
70.33	0.84709	11.22	0.95953		
58.22	0.87210	0	0.97800		
49.94	0.88807				

Kastha, 1956			
Absorption spectrum at -180°			
Timofeev, 1905			
%	U	%	U
0	0.405	15.5	0.429
8	0.424	100	0.5933
initial	%	final	Q dil (by mole alcohol)
0		1.85	+131
1.85		3.3	+132
3.3		7.6	+132
7.6		11.4	+147
11.4		15.1	+140
0		4.9	+115
4.9		8.26	+121
(by mole pyridine)			
100	91.6		+465
91.6	85.0		+356
85.0	78.7		+286
62.1	58.3		+122
Pyridine (C ₅ H ₅ N) + Propyl Alcohol (C ₃ H ₈ O)			
Timofeev, 1905			
initial	%	final	Q dil (by mole alcohol)
0		5.6	+ 40
5.6		12.0	+ 50.9
24.3		27.8	+ 69.4
Pyridine (C ₅ H ₅ N) + Isopropyl Alcohol (C ₃ H ₈ O)			
Kreglewski, 1954			
%	mol%	crit. t.	
0	0	344.77	
9.4	12.0	332.50	
18.2	22.7	322.70	
60.8	67.1	275.05	
88.5	91.0	245.05	
89.5	91.8	244.50	
98.9	99.2	236.25	
100	100	235.25	
Pyridine (C ₅ H ₅ N) + Butyl Alcohol (C ₄ H ₁₀ O)			
Prentiss, 1929			
mol %	p	mol %	p
20°			
20.1	21.5	50	19.5
20.1	20.5	80	16.5
22.5	20.5	80.5	16.0

Lecat, 1949			
%	b. t.	Dt mix	
0	115.4		
66	-	- 0.7	
71	118.7		
100	117.8		
Pyridine (C ₅ H ₅ N) + Isobutyl Alcohol (C ₄ H ₁₀ O)			
Kreglewski, 1954			
wt %	mol %	crit. t.	
0	0	344.77	
7.5	7.9	339.60	
11.6	12.3	336.40	
36.4	37.9	320.15	
69.7	71.1	297.40	
96.4	96.6	279.65	
100	100	276.70	
Pyridine (C ₅ H ₅ N) + Tert. Butyl Alcohol (C ₄ H ₁₀ O)			
Prentiss, 1929			
mol %	d	mol %	d
25°			
33	0.904	67	0.840
33	0.903	67	0.841
Pyridine (C ₅ H ₅ N) + Isoamyl Alcohol (C ₅ H ₁₂ O)			
Kreglewski, 1954			
wt %	mol %	crit. t.	
0	0	344.77	
5.6	5.1	342.70	
23.9	22.0	335.30	
46.2	43.5	326.60	
73.8	71.1	316.55	
95.7	95.3	307.35	
100	100	306.05	
Pyridine (C ₅ H ₅ N) + 3-Pentanol (C ₅ H ₁₂ O)			
Lecat, 1949			
%	b. t.		
0	115.4		
55	117.4	Az	
100	116.0		

Pyridine (C_5H_5N) + Methyl Malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
	20°					
50,600	-19.07	-23.12	-28.46	-36.07	-39.82	-42.09
25,300	-20.36	-24.90	-31.41	-39.13	-42.89	-
12,650	-22.69	-27.83	-34.78	-41.34	-45.14	-
4,972	-23.93	-28.36	-36.00	-42.44	-49.48	-54.30
2,486	-26.15	-30.57	-38.21	-45.05	-52.70	-

Pyridine (C_5H_5N) + Methyl Tartrate ($C_6H_{10}O_6$)

Yen ki Meng, 1936

t	d	(α) yellow	(α) green
	19.144 %		
3	1.0580	43.79	48.90
18.4	1.0446	39.72	44.12
29	1.0392	36.70	40.84
39	1.0278	34.68	38.15
49.7	1.0194	32.10	35.37
60	1.0110	29.92	33.15
70	1.0026	27.99	30.98
80	0.9941	26.37	28.87

Lowry and Abram, 1915

w. l.	(α)	
	20g/100cc	100 %
	20°	
6438	+30.48	+2.65
5893	36.32	2.22
5782	37.43	-
5780	37.44	2.05
5700	38.43	-
5461	41.60	+1.28
5218	45.23	"
5153	46.16	"
5105	46.82	"
5086	47.15	-0.39
4800	52.01	-2.47

Pyridine (C_5H_5N) + Ethyl Tartrate ($C_8H_{14}O_6$)

Patterson, 1916

t	d	t	d
	19.263 %		100 %
0.0	1.0410	16.8	1.2087
13.8	1.0277	37.2	1.1878
15.7	1.0262	46.8	1.1783
43.6	0.9981	58.3	1.1665
58.6	0.9878	68.1	1.1566
66.3	0.9742	76.2	1.1484
91.6	0.9476	99.4	1.1248
100.0	0.9386		

 (α)

t	6708 Å	6234.3 Å	5769 Å
	19.263 %		
0.0	34.74	39.50	46.75
15.7	32.26	36.63	43.23
58.6	26.38	29.90	35.03
100.0	21.99	25.185	29.50

t	5460.7 Å	4959.7 Å	4358.3 Å
	19.263 %		
0.0	52.06	62.48	78.63
15.7	48.11	57.63	72.06
58.6	38.704	45.89	59.90
100.0	32.63	38.41	46.51

t	6708 Å	6232 Å	5769 Å
	100 %		
0.0	5.17	5.42	5.35
15.6	6.64	7.03	7.33
59.6	9.57	10.47	11.74
115	11.51	12.80	14.37

t	5460.7 Å	4959.7 Å	4358 Å
	100 %		
0.0	4.99	3.31	-3.10
15.6	7.26	6.18	+1.13
59.6	12.06	12.35	9.95
115	15.37	16.77	16.46

Pyridine (C_5H_5N) + Propyl tartrate ($C_{10}H_{18}O_6$)

Holty, 1905

%	d	(α) _D
26°		
100	1.1266	12.73
95	1.1185	16.86
90	1.1141	20.26
75	1.0961	31.04
50	1.0555	40.66
25	1.0130	47.76
20	1.0032	47.69
15	0.9967	47.99
10	0.9872	48.82
5	0.9790	48.99
2	0.9739	50.15
0.5	0.9716	51.81
0.25	0.9712	50.29
0.125	0.9709	50.10

Pyridine (C_5H_5N) + Levulose ($C_6H_{12}O_6$)

Holty, 1905

%	d	(α) _D
26°		
0	0.9705	-
7.60	1.005	-36.82
12.61	1.0234	-39.47
18.49	1.0488	-45.44

l-Picoline (C_6H_7N) + Isoamyl alcohol ($C_5H_{12}O$)

Lecat, 1949

%	b. t.
0	130.7
-	132.5 Az
100	131.9

2,6-Lutidine (C_7H_9N) + Ethyl alcohol (C_2H_6O)

Dunstan, Thole and Hunt, 1909

%	d	η
25°		
100	0.79043	1153.6
90.03	0.80382	1149.9
80.12	0.81972	1164.3
60.23	0.85145	1202.3
40.30	0.88029	1132.8
20.57	0.90743	1020.4
9.45	0.92101	968.6
0	0.93218	877.66

2,4,6-Collidine ($C_8H_{11}N$) + Glycol ($C_2H_6O_2$)

Kurtyka, 1956

$$Az = 9.7 \% (17.4 \text{ mol. } \%) 170.50^\circ$$

Quinoline (C_9H_7N) + Ethyl Alcohol (C_2H_6O)

Hatem, 1949

%	η	χ
20°		
0	3730	-0.670
10	3120	-
20	2650	-0.680
30	2260	-
40	1960	-0.685
50	1770	-
60	1600	-0.688
70	1460	-
80	1360	-0.703
90	1250	-
100	1200	-0.743

%	18°	20°	d 25°	30°	35°
0	1.0968	1.0952	1.0913	1.0879	1.0845
11.22	0832	0813	0770	0734	0696
14.96	0782	0763	0724	0691	0660
61.73	0.9748	0.9731	0.9690	0.9656	0.9623
85.17	8797	8780	8746	8706	8678
97.79	8071	8051	8010	7971	7944
98.60	8002	7983	7946	7910	7888
99.112	7971	7956	7919	7882	7855
99.542	7944	7928	7890	7856	7830
100	7943	7901	7861	7829	7775

%	18°	20°	n _D 25°	30°	35°
0	1.6294	1.6280	1.6252	1.6226	1.6203
11.22	6165	6151	6115	6085	6056
14.96	6111	6098	6064	6038	6012
61.73	5180	5163	5128	5098	5070
85.17	4362	4350	4324	4320	4282
97.79	3750	3740	3716	3694	3684
98.60	3708	3698	3671	3646	3625
99.112	3680	3670	3647	3623	3602
99.542	3652	3642	3620	3598	3576
100	3634	3615	3596	3576	3556

Kernot and Pomilio, 1911

%	η	%	η
25°			
100	1078.6	31.02	2016.7
86.70	1092.0	24.31	2257.1
76.50	1273.0	14.43	2584.3
60.91	1400.9	7.91	2916.1
49.77	1640.5	0	3360.6
37.35	1877.2		

Quinoline (C_9H_7N) (b.t.=237.3) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	79.5	196.35	-
Diglycol	$C_4H_{10}O_3$	245.5	29	233.6	+5.8 (50%)
Dipropylene glycol	$C_6H_{14}O_3$	229.2	72	228.0	-
Butoxy diglycol	$C_8H_{18}O_3$	231.2	56	229.5	-
Methoxy triglycol	$C_7H_{16}O_4$	245.25	22	235.55	-

Quinoline (C_9H_7N) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.929	-13.52	-17.93	-20.23	-24.94	-27.34	-29.04
24.9645	-14.54	-18.23	-21.75	-26.08	-28.52	-
12.9823	-15.06	-18.75	-21.79	-26.12	-28.52	-
4.872	-15.39	-20.11	-22.58	-25.45	-27.09	-29.15
2.436	-15.60	-20.53	-22.99	-25.45	-27.09	-

Quinoline (C_9H_7N) + Methyl Tartrate ($C_6H_{10}O_6$)

Yen Ki Heng, 1936

t	d	(α)	
		Hg yellow	Hg green
17.601 %			
0	1.1499	2.98	2.44
12	1.1418	1.81	1.06
17	1.1384	1.51	0.56
30	1.1295	0.42	-0.48
40	1.1227	-0.18	-1.03
50	1.1159	-	-1.35
61	1.1084	-0.78	-1.55
69	1.1027	-0.58	-1.47
73	1.1004	-0.52	-1.41
80	1.0955	-0.46	-1.35

Lowry and Abram, 1915

w.l.	21.5 g/100cc	100 %
20°		
6438	+4.47	+2.65
5893	3.56	2.22
5782	3.26	-
5780	3.19	2.05
5700	3.04	-
5461	+1.73	+1.28
5218	-0.04	"
5153	0.58	"
5105	1.03	"
5086	1.35	-0.39
4800	-5.24	-2.47

Quinoline (C_9H_7N) + Ethyl Tartrate ($C_8H_{14}O_6$)

Patterson and Mac Donald, 1909

t	d	t	(α) _D
1.021 %			
26	1.090	26	16.88
10.05 %			
19.5	1.109	17.7	23.45
22.5	1.107	20	22.9
27.0	1.103	26	21.55
99.0	1.044	47.5	18.38
		85.5	16.13
		114.5	16.38
25.40 %			
19.8	1.1293	16.4	28.26
22.6	1.1268	20.	27.3
25.3	1.1247	26	25.89
99.0	1.060	42	23.23
		60.8	20.88
		82.5	19.49
		107	19.03
49.98 %			
20.7	1.1587	17.2	29.29
27.2	1.1527	20	28.6
30.6	1.151	26	27.40
		46.9	24.24
		77	22.17
		105	20.70
		131	20.16
75.10 %			
20.3	1.181	20	21.7
28.0	1.174	21.3	21.56
		26	21.08
		41.5	20.13

For 100 %, see : Aniline + Ethyl Tartrate

Patterson and Montgomerie, 1909

19.75 vol %	Dv = 0.70 %
	Dt = +9.5°

Quinoline (C_9H_7N) + Isobutyl tartrate
($C_{12}H_{22}O_6$)

Patterson, 1916

t	18.0	38.95	69.55	99.55	151.0
d	1.1003	1.0832	1.0590	1.0330	0.9880

$$\lambda = 6716.3$$

t	0.0	39.35	69.75	99.5	147.5
(α)	54.49	39.40	32.67	28.35	23.53

$$\lambda = 6234.3$$

$$\lambda = 5790.5$$

t	0.0	18.0	39.35	69.75	99.5	144.2
(α)	73.72	62.56	52.79	42.99	37.24	33.16

$$\lambda = 5460.7$$

t	0.0	39.35	69.75	99.5	145.0
(α)	83.36	59.45	48.15	41.87	36.66

$$\lambda = 4959.7$$

$$\lambda = 4358.3$$

Quinaldine ($C_{10}H_9N$) + Diglycol ($C_4H_{10}O_3$)

Lecat, 1949

%	b. t.
---	-------

0	246.5
-	241.0 Az
100	245.5

Quinaldine ($C_{10}H_9N$) + Methoxytriglycol
($C_7H_{16}O_4$)

Lecat, 1949

%	b. t.
---	-------

0	246.5
-	243.0 Az
100	245.25

Coniine ($C_8H_{17}N$) + Ethyl Alcohol (C_2H_6O)

Zecchini, 1893

%	t	(α) _D
---	---	---------------------------

86.4134	24.4	8.12
81.1762	22.7	8.70
46.0118	26.0	9.98

Nicotine ($C_{10}H_{14}N_2$) + Methyl Alcohol (CH_4O)

Winther, 1907

%	d	(α) _D
---	---	---------------------------

20°

0	1.00995	-163.85
18.767	0.97073	-155.74
34.889	.93523	-149.14
52.389	.89634	-143.17
74.787	.84703	-136.02
87.934	.81901	-132.6
93.969	.80639	-131.0
96.556	.80106	-130.5
100	.79383	-

Gennari, 1896

%	d
---	---

20°

90.240	0.81226
81.040	0.83358
0	1.01071

%	red	D	(α) green	pale blue	dark blue
---	-----	---	-----------------------	--------------	--------------

90.24	-	98.23	-130.43	-167.67	-205.80	-248.60
81.04	-	99.46	-131.61	-170.67	-206.65	-266.10
0	-	123.37	-162.84	-209.78	-250.71	-317.79

Nicotine ($C_{10}H_{14}N_2$) + Ethyl Alcohol (C_2H_6O)

Landolt, 1877

%	d	n _D	(α) _D
---	---	----------------	---------------------------

20°

0	1.01101	1.52828	161.55
9.9055	0.98839	1.50994	158.65
25.0664	0.95358	1.48223	154.92
40.0655	0.92001	1.45589	151.78
54.9154	0.88747	1.43125	148.81
69.9732	0.85536	1.40693	145.42
85.0433	0.82506	1.38412	141.60
100	0.7957	1.36242	-

Winther, 1907

%	0°	10°	d	20°	30°
---	----	-----	---	-----	-----

100	0.8090	0.8004	0.7918	0.7832
89.76	0.8288	0.8205	0.8122	0.8039
74.07	0.8615	0.8531	0.8447	0.8363
58.10	0.8955	0.8872	0.8789	0.8706
43.27	0.9283	0.9199	0.9115	0.9031
0	1.0250	1.0180	1.0100	1.0025

Dewar and Jones, 1908									
t	α		t	α	t	d	α	4359	
	21.2 g/100cc					5461 Å	4916		
+20	-30.0		-90	-25.3		66.67 %			
-50	-28.7		-120	-22.0	0	-	-52.60	-71.14	-
-70	-27.3				20.8	1.1425	-53.52	-72.04	-
					43.5	1.1203	-54.14	-73.01	-
					66	1.0979	-54.36	-72.91	-
					90	1.0745	-54.21	-	-
Nicotine ($C_{10}H_{14}N_2$) + Propyl Alcohol (C_3H_8O)									
Heine, 1896					t	d	α	4359	
%	$(\alpha)_D$	%	$(\alpha)_D$			6716 Å	6234	5790	
0	-164.00	85.93	-147.35			39.81 %			
11.45	160.76	90.35	-146.35		0	-	-67.56	-80.8	-97.37
39.99	156.34	92.54	-145.89		20	1.0900	-67.94	-81.15	-98.22
74.63	149.92	98.17	-143.67		44.75	1.0670	-68.63	-81.73	-98.55
					66	1.0472	-68.28	-81.65	-98.23
					89.5	1.0253	-69.36	-81.98	-97.47
Nicotine ($C_{10}H_{14}N_2$) + Ethyl tartrate d ($C_8H_{14}O_6$)					t	d	α	4359	
Patterson, Lamberton and Cunningham, 1939						5461 Å	4916		
t	5461 Å		t	α		39.81 %			
14.0	8.18	24.8	10.26		0	-	-112.8	-	-
16.0	8.57	27.5	10.53		20	1.0900	-113.56	-	-
20.0	9.45	36.0	11.62		44.75	1.0670	-113.76	-	-
					66	1.0472	-113.60	-	-
					89.5	1.0253	-112.56	-	-
Nicotine ($C_{10}H_{14}N_2$) + Ethyl tartrate r ($C_8H_{14}O_6$)									
Patterson, Lamberton and Cunningham, 1939					t	d	α	4359	
t	d	6716 Å	6234	5790		6716 Å	6234	5790	
		92.12 %				92.12 %			
0	-	-1.18	-2.30	-3.97	0	-	-102.8	-121.6	-144.1
22	1.1989	-0.12	-1.00	-2.35	18.8	1.1921	-105.5	-124.7	-148.9
44	1.1675	+0.73	+0.24	-0.90	44.0	1.1676	-109.6	-129.8	-155.0
66	1.1454	+1.58	+1.14	+0.15	66.9	1.1443	-111.8	-133.8	-160.0
89.5	1.9215	+2.16	+1.82	+0.99	90.7	1.1202	-115.4	-136.8	-163.2
t	d	5461 Å	4916	4359	t	d	α	4359	
		92.12 %				5461 Å	4916		
0	-	-5.84	-11.42	-24.36		92.12 %			
22	1.1989	-4.07	-8.96	-20.86	0	-	-167.0	-218.3	-306.8
44	1.1675	-2.32	-6.83	-17.40	18.8	1.1921	-172.2	-224.7	-314.2
66	1.1454	-1.09	-4.90	-14.69	44.0	1.1676	-179.3	-233.2	-325.2
89.5	1.9215	-0.06	-3.47	-12.29	66.9	1.1443	-184.6	-240.1	-334.9
t	d	6716 Å	6234	5790	90.7	1.1202	-188.5	-243.9	-338.5
		66.67 %			t	d	α	4359	
0	-	-30.41	-36.71	-44.79		6716 Å	6234	5790	
20.8	1.1425	-31.24	-37.33	-45.47		66.67 %			
43.5	1.1203	-31.41	-37.87	-46.17	0	-	-105.9	-126.7	-151.4
66	1.0979	-31.65	-38.08	-46.35	19.0	-	-111.1	-131.2	-156.7
90	1.0745	-31.64	-38.03	-46.22	29.2	1.1346	-111.6	-133.2	-159.4
					54.2	1.1093	-116.9	-138.6	-164.0
					86.3	1.0783	-119.9	-141.4	-168.0

Nicotine (C ₁₀ H ₁₄ N ₂) + Isobutyl Tartrate d (C ₁₂ H ₂₂ O ₆) Patterson, Lamberton and Cunningham, 1939				
t	d	5461 Å	α 4916	4359
66.67 %				
0	-	-175.1	-228.8	-320.0
19.0	-	-180.9	-236.1	-330.2
29.2	1.1346	-183.8	-239.4	-334.9
54.2	1.1093	-189.9	-247.1	-344.4
86.3	1.0783	-194.3	-253.4	-352.6
t	d	6716 Å	α 6234	5790
39.80 %				
0	-	-133.4	-135.0	-161.2
23.0	1.0869	-116.8	-138.8	-165.5
44.8	1.0669	-119.4	-141.3	-168.7
67.4	1.0461	-121.1	-143.3	-170.9
90.2	1.0253	-121.9	-144.4	-172.3
t	d	5461 Å	α 4916	4359
39.80 %				
0	-	-186.2	-242.3	-340.8
23.0	1.0869	-191.2	-247.9	-348.6
44.8	1.0669	-194.8	-252.9	-355.2
67.4	1.0461	-197.2	-255.0	-358.1
90.2	1.0253	-198.9	-254.2	-360.7
Nicotine (C ₁₀ H ₁₄ N ₂) + Ethyl mesotartrate (C ₈ H ₁₄ O ₆) Patterson, Lamberton and Cunningham, 1939				
t	d	6716 Å	α 6234	5790
39.803 %				
0	-	-113.6	-134.0	-160.3
17.8	-	-	-	-
20.5	1.0928	-115.8	-137.0	-163.4
43.4	1.0723	-117.6	-139.5	-166.8
66.1	1.0516	-119.4	-141.3	-168.8
89.9	1.0297	-120.7	-142.9	-170.6
t	d	5461 Å	α 4916	4359
39.803 %				
0	-	-185.3	-240.1	-338.8
17.8	-	-188.5	-244.1	-
20.5	1.0928	-188.7	-	-345.0
43.4	1.0723	-192.3	-249.6	-350.0
66.1	1.0516	-195.0	-252.0	-354.7
89.9	1.0297	-196.8	-253.7	-357.4
Nicotine (C ₁₀ H ₁₄ N ₂) + Isobutyl tartrate l (C ₁₂ H ₂₂ O ₆) Patterson, Lamberton and Cunningham, 1939				
t	d	6716 Å	α 6234	5790
39.799 %				
0	-	-87.70	-103.25	-122.93
21.2	1.0473	-87.23	-102.85	-122.40
44.8	1.0258	-86.50	-101.85	-121.03
66.5	1.0061	-85.13	-100.15	-119.20
89.3	0.9862	-83.48	-98.00	-116.75
t	d	5461 Å	α 4916	4359
39.799 %				
0	-	-141.45	-181.45	-251.68
21.2	1.0473	-140.85	-179.53	-250.03
44.8	1.0258	-139.25	-178.38	-247.58
66.5	1.0061	-137.13	-176.80	-243.90
89.3	0.9862	-134.35	-171.68	-239.65

Nicotine ($C_{10}H_{14}N_2$) + Isobutyl tartrate r.
($C_{12}H_{22}O_6$)
Patterson, Lamberton and Cunningham, 1939

t	d	α		
		6716 Å	6234	5790
39.8 %				
0	-	-117.6	-139.1	-166.1
20.6	1.0470	-120.2	-141.9	-169.2
46.0	1.0245	-122.3	-144.8	-172.9
65.2	1.0071	-122.8	-145.9	-174.4
86.2	0.9885	-124.0	-146.7	-175.4
t	d	α		
		5461 Å	4916	4359
39.8 %				
0	-	-191.9	-249.4	-350.3
20.6	1.0470	-196.0	-253.9	-357.2
46.0	1.0245	-199.5	-258.4	-364.0
65.2	1.0071	-201.4	-260.3	-366.2
86.2	0.9885	-202.3	-261.9	-367.5

Nicotine ($C_{10}H_{14}N_2$) + Isobutyl mesotartrate
($C_{12}H_{22}O_6$)
Patterson, Lamberton and Cunningham, 1939

t	d	α		
		6716 Å	6234	5790
39.804 %				
0	-	-117.6	-139.1	-166.2
18.5	1.0518	-119.8	-140.8	-168.9
41.0	1.0325	-121.2	-143.1	-170.9
65.8	1.0107	-122.5	-145.1	-173.2
89.3	0.9902	-123.9	-145.9	-174.3
t	d	α		
		5461 Å	4916	4359
39.804 %				
0	-	-191.9	-248.8	-351.0
18.5	1.0518	-194.6	-252.4	-354.8
41.0	1.0325	-197.4	-256.0	-359.7
65.8	1.0107	-199.9	-257.9	-363.1
89.3	0.9902	-201.2	-259.6	-364.5

Phenylhydrazine ($C_6H_8N_2$) + Methyl Malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

(α)						
g/100cc	red	yellow	green	pale blue	dark blue	viol.
20°						
50.135	-11.17	-13.56	-16.26	-18.85	-20.25	-22.14
25.0675	-13.60	-17.11	-20.23	-22.82	-24.41	-
12.5338	-14.68	-18.19	-21.86	-26.17	-28.16	-
4.857	-16.68	-20.18	-23.68	-27.79	-29.65	-31.91
2.4285	-15.65	-18.53	-21.41	-24.71	-27.18	-

Hydrazobenzene ($C_{12}H_{12}N_2$) + Benzoin
($C_{14}H_{12}O_2$)

Vanstone, 1913

%	f. t.	E	%	f. t.	E
100	133.0	-	46.55	100.4	98.4
95.57	130.6	127.0	35.61	100.3	98.4
77.44	122.1	98.4	16.93	116.0	98.4
59.28	110.8	98.4	0	127.2	-

Azobenzene ($C_{12}H_{10}N_2$) + Ethyl Alcohol (C_2H_6O)

Innes, 1918

%	p	%	p
75°			
100	671.5	42.8	602.7
91.91	658.9	36.8	598.0
84.2	647.9	27.7	582.5
75.4	636.8	19.9	561.7
65	625.9	14.1	535.2
54	614.5		

Azobenzene ($C_{12}H_{10}N_2$) + Benzoin ($C_{14}H_{12}O_2$)

Vanstone, 1913

%	f. t.	E	%	f. t.	E
100	133.0	-	35.47	103.0	63.8
90.79	127.4	121.0	17.13	96.0	63.8
68	120.0	-	18.03	85.8	63.8
57.28	115.6	-	6.80	63.8	63.8
47.04	110.5	63.8	0	66.2	-

Acetonitrile (C_2H_3N) + Methyl Alcohol (CH_3O)

Joukovski, 1933

%	P	P ₁	P ₂
30°			
100	160.2	0	160.2
88	174	28	146.0
80	179.8	41.3	138.5
63.7	184.0	64	120.0
61.8	182.3	65.6	116.7
40	175	86	89.0
28.7	165.6	89	76.2
26	162	89.5	73.0
15	147	97.0	50.0
0	110.6	110.6	0

L	mol %	V	L	mol %	V
30°					
26	45.3	63.7	65.8		
40	51.0	88	83.9		

Vincent and Delachanal, 1880

%	b. t.	d 0°	%	b. t.	d 0°
0	81.6	0.8052	60	64.2	0.8110
10	74.0	0.8063	70	63.8	0.8115
20	69.2	0.8073	80	63.7	0.8115
30	67.1	0.8083	90	64.0	0.8109
40	65.7	0.8093	100	64.8	0.8098
50	64.8	0.8102			

Lecat, 1949

%	b. t.
0	81.6
81	63.45 Az
100	64.65

Joukovsky, 1933

mol %	n _{He y}	mol %	n _{He y}
16°			
100	1.33023	42.8	1.34175
87.4	1.33345	30.1	1.34317
64.3	1.33845	0	1.34595
54.9	1.34009		

Popov, 1926

%	Q mix (by mole nitrile)
93.3	-903
87.4	-798
82.9	-741
78.25	-699
73.3	-599

Acetonitrile (C_2H_3N) + Ethyl Alcohol (C_2H_5O)

Vierk, 1950

mol %	P	20°	30°	40°
100	44.1	78.0	133.8	
89	67.2	106.3	156.4	
72	75.3	122.1	177.8	
57	81.3	126.9	189.9	
41	81.9	130.3	200.9	
28	81.9	131.0	201.8	
18	80.8	129.6	200.1	
8	76.5	123.6	188.1	
0	70.9	111.8	170.8	

Vierk, 1950

mol %	P	P ₁	P ₂
20°			
81	72.5	35.0	37.5
68	78.0	42.9	35.1
59	80.5	47.9	32.6
50	81.5	48.9	32.6
32	81.9	53.2	28.7
19	81.0	57.5	23.5
9	77.8	63.8	14.0
5	75.0	66.8	8.3

Vincent and Delachanal, 1880

%	b. t.	d 0°	%	b. t.	d 0°
0	81.6	0.8052	56	72.6	-
10	76.8	0.8059	60	72.7	0.8102
20	74.8	0.8067	70	73.2	0.8114
30	73.8	0.8075	80	74.1	0.8127
40	73.2	0.8083	90	75.4	0.8130
50	72.7	0.8092	100	78.4	0.8120

Lecat, 1949					
%		b. t.			
0		81.6			
56		72.5 Az			
100		78.3			
Vierk, 1950					
%		d		%	
20°					
100	0.7894	72	0.7901	33	0.7859
96	0.7913	67	0.7901	17	0.7845
90	0.7922	57	0.7889	0	0.7829
83	0.7916	45	0.7876		
Thacker and Rowlinson, 1954					
mol %		D _v (cc/mole)		mol %	
10		-0.04		60	
20		-0.05		80	
40		-0.03		90	
50		-0.02		+0.01	
Vierk, 1950					
%		η		%	
20°					
100	1232.7	67	641.5		
96	1120.4	57	558.5		
90	997.9	33	441.8		
88	939.0	17	400.1		
83	906.5	0	383.0		
72	703.3				
Thacker and Rowlinson, 1954					
mol %		D _{η/η}		mol %	
		56°		100°	
		80°			
17	-	0.014	-		
18	0.020	-	0.004		
45	0.026	-	0.010		
47	-	0.018	-		
78	-	-	0.007		
80	-	0.011	-		
18	0.019	-	-		
D _{η/η} : Deviation from additivity .					

Vierk, 1950			
mol %		σ	
20°			
100	21.64	47	24.36
95	22.21	46	24.36
88	22.92	28	25.08
81	23.64	20	25.79
75	23.64	10	26.51
65	23.92	2	27.94
51	24.21	0	28.37
mol %		n _D	
20°			
100	1.3611	24	1.3488
79	1.3589	20	1.3479
78	1.3586	8	1.3454
62	1.3560	0	1.3444
51	1.3541		
Popov, 1926			
%		Q mix	
		Q dil	
92.7	-1312.5	75.4	-739
86.65	-1044	70.8	-658
80.7	-868		
Vierk, 1950			
mol %		Q mix	
20°			
93.1	-94.59	37.6	-329.27
81.8	-207.72	29.6	-305.43
71.0	-283.04	21.2	-259.61
61.3	-323.64	13.1	-191.26
54	-341.05	5.6	-98.80
44.7	-339.02		
Thacker and Rowlinson, 1954			
mol %		Q mix	
		Q mix	
10	-130	60	-360
20	-230	80	-260
40	-330	90	-150
50	-365		

Acetonitrile (C_2H_3N) + Propyl Alcohol (C_3H_8O)

Lecat, 1949

%	b. t.
0	81.6
22	81.0 Az
100	97.2

Acetonitrile (C_2H_3N) + Isopropyl Alcohol
(C_3H_8O)

Lecat, 1949

%	b. t.
0	81.6
48	74.5 Az
100	82.4

Acetonitrile (C_2H_3N) + Decyl Alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	sat. t.
5.4	0.0	-
17.7	-	10.0
34.2	-	20.0
100	6.88	-

Acetonitrile (C_2H_3N) + Lauryl Alcohol
($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	sat. t.
1.3	0.0	-
3.7	10.0	-
14.2	20.0	-
22.9	-	30.0
100	23.95	-

Acetonitrile (C_2H_3N) + Tetradecyl Alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	sat. t.
0.1	10.0	-
1.3	20.0	-
7.0	30.0	-
18.7	-	40.0
100	38.26	-

Acetonitrile (C_2H_3N) + Cetyl Alcohol
($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	sat. t.
0.1	20.0	-
1.1	30.0	-
4.8	40.0	-
17.2	-	50.0
100	49.62	-

Acetonitrile (C_2H_3N) + Octadecyl Alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
0.3	30.0	43.18	50.0
1.6	40.0	100	57.96

Acetonitrile (C_2H_3N) + Methyl Malate 1
Grossmann and Landau, 1910 ($C_6H_{10}O_5$)

g/100cc

(α)
red yellow green pale dark viol.
blue blue

20°

49.772	-6.83	- 8.04	- 9.14	-10.35	-11.05	-12.05
24.886	-7.59	- 9.20	-10.81	-12.42	-13.34	-
12.443	-8.04	- 9.64	-11.25	-12.62	-13.50	-
4.902	-9.18	-10.81	-12.04	-13.26	-14.69	-16.52
2.451	-9.79	-11.42	-13.46	-15.91	-17.54	-

Acetonitrile (C_2H_3N) + Lactonitrile (C_5H_5ON),

Walden, 1906

vol %	d		η	
	0°	25°	0°	25°
0	0.8173	0.7896	461	357
25	0.8626	0.8374	694	500
50	0.9095	0.8865	1069	734
75	0.9589	0.9356	1462	1173
100	1.0062	0.9845	4312	2236

Acetonitrile (C_2H_3N) + Menthol ($C_{10}H_{20}O$)
Eggers, 1904

%	t	ε
0.0	21	36.5
7.55	23	32.3
12.7	23.5	29.0
20.2	23.5	24.0
25.2	23.5	22.5
30.23	23	19.5

Propionitrile (C ₃ H ₅ N) + Ethyl alcohol (C ₂ H ₆ O)				
Homfray, 1905				
	%	p	%	p
Az	72.5	760	64.5	100
b. t.=77.2	72.0	200	62.0	45
	%	n _C	n _D	n _F
19°				
100	1.36018	1.36202	1.36627	
98.4	1.36047	1.36220	-	
93.2	1.36083	1.36225	-	
78.2	1.36124	1.36305	-	
77	1.36156	1.36336	1.36765	
73.8	1.36151	1.36332	-	
71.5	1.36183	1.36354	1.36797	
64.7	1.36192	1.36372	-	
62.6	1.36220	1.36396	1.36823	
45.5	1.36283	1.36462	1.36900	
29.5	1.36348	1.36525	1.36970	
12.5	1.36403	1.36589	-	
8.3	1.36430	1.36598	-	
0	1.36486	1.36644	1.37100	

Propionitrile (C ₃ H ₅ N) (b. t.=97.2) + Alcohols				
Lecat, 1949				
	2nd Comp.	Az		
Name	Formula	b. t.	%	b. t.
Ethyl alcohol	C ₂ H ₆ O	78.3	-	78.1
Propyl alcohol	C ₃ H ₈ O	97.2	50	90.5
Isopropyl alcohol	C ₃ H ₈ O	82.4	88	81.5
Isobutyl alcohol	C ₄ H ₁₀ O	108.0	24	95.5
Tert. amyl alcohol	C ₅ H ₁₂ O	102.38	43	94.5

Propionitrile (C ₃ H ₅ N) + Isopropyl Alcohol (C ₃ H ₈ O)				
Thacker and Rowlinson, 1954				
	mol %	Dv (cc/mole)	Q mix	
	90	0.07	+180	
	70	0.22	370	
	50	0.27	410	
	30	0.26	360	
	10	0.11	180	

mol %				D _n /η		
				56°	80°	100°
15	0.019	-	-			
18	-	-	-			0.021
22	-	0.022	-			-
46	-	-	-			0.020
47	0.027	-	-			-
49	-	0.024	-			-
78	-	0.015	-			-
79	0.019	-	-			-
81	-	-	-			0.007
D _n = deviation from additivity						

Propionitrile (C ₃ H ₅ N) + Glycerol (C ₃ H ₈ O ₃)				
Bingham, 1907				
C.S.T. = 140°				

Butyronitrile (C ₄ H ₇ N) + Butyl Alcohol (C ₄ H ₁₀ O)				
Lecat, 1949				
	%	b. t.		
	0	117.9		
	50	113.0 Az		
	100	117.8		

Butyronitrile (C ₄ H ₇ N) + Isobutyl Alcohol (C ₄ H ₁₀ O)				
Lecat, 1949				
	%	b. t.		
	0	117.9		
	90	106.8 Az		
	100	108.0		

Isobutyronitrile (C ₄ H ₇ N) + Propyl Alcohol (C ₃ H ₈ O)				
Lecat, 1949				
	%	b. t.		
	0	103.85		
	70	95.0 Az		
	100	97.2		

Isobutyronitrile (C_4H_7N) + tert. Amyl alcohol
($C_5H_{12}O$)

Lecat, 1949

%	b. t.
0	103.85
58	99.5 Az
100	102.35

Valeronitrile (C_5H_9N) + Amyl alcohol ($C_5H_{12}O$)

Lecat, 1949

%	b. t.
0	141.3
58	136.5 Az
100	138.2

Valeronitrile (C_5H_9N) + Ethoxyglycol ($C_4H_{10}O_2$)

Lecat, 1949

%	b. t.
0	141.3
-	135.0 Az
100	135.3

Isovaleronitrile (C_5H_9N) + Methoxyglycol
($C_3H_8O_2$)

Lecat, 1949

%	b. t.
0	130.5
-	130.0 Az
100	124.5

Capronitrile ($C_6H_{11}N$) + Cyclohexanol ($C_6H_{12}O$)

Lecat, 1949

%	b. t.
0	163.9
64	158.0 Az
100	160.8

Capronitrile ($C_6H_{11}N$) + Hexyl alcohol ($C_6H_{14}O$)

Lecat, 1949

%	b. t.
0	163.9
81	156.6 Az
100	157.85

Capronitrile ($C_{10}H_{19}N$) + Methyl alcohol (CH_3O)

Hoerr, Binkerd and al., 1944

%	f. t.
93.1	-40.0
37.0	-20.0
0	-14.46

Capronitrile ($C_{10}H_{19}N$) + Ethyl alcohol (C_2H_5O)

Hoerr, Binkerd and al., 1944

%	f. t.
93.0	-40.0
42.4	-20.0
0	-14.46

Capronitrile ($C_{10}H_{19}N$) + Isopropyl alcohol
(C_3H_8O)

Hoerr, Binkerd and al., 1944

%	f. t.
93.0	-40.0
40.0	-20.0
0	-14.46

Capronitrile ($C_{10}H_{19}N$) + Butyl alcohol ($C_4H_{10}O$)

Hoerr, Binkerd and al., 1944

%	f. t.
92.8	-40.0
39.2	-20.0
0	-14.46

Lauronitrile ($C_{12}H_{23}N$) + Methyl Alcohol (CH_4O)		Myristonitrile ($C_{14}H_{27}N$) + Ethyl Alcohol (C_2H_6O)			
Hoerr, Binkerd and al., 1944		Hoerr, Binkerd and al., 1944			
%	f.t.	%	f.t.	%	f.t.
98.0	-40.0	98.8	-40.0	62.9	+10.0
95.2	-20.0	97.3	-20.0	0	19.25
38.4	0.0	92.0	0.0		
0	+ 4.02				
Lauronitrile ($C_{12}H_{23}N$) + Ethyl Alcohol (C_2H_6O)		Myristonitrile ($C_{14}H_{27}N$) + Isopropyl Alcohol (C_3H_8O)			
Hoerr, Binkerd and al., 1944		Hoerr, Binkerd and al., 1944			
%	f.t.	%	f.t.	%	f.t.
97.7	-40.0	98.5	-40.0	59.9	+10.0
94.8	-20.0	97.7	-20.0	0	19.25
35.7	0.0	91.2	0.0		
0	+ 4.02				
Lauronitrile ($C_{12}H_{23}N$) + Isopropyl Alcohol (C_3H_8O)		Myristonitrile ($C_{14}H_{27}N$) + Butyl Alcohol ($C_4H_{10}O$)			
Hoerr, Binkerd and al., 1944		Hoerr, Binkerd and al., 1944			
%	f.t.	%	f.t.	%	f.t.
97.8	-40.0	98.3	-40.0	54.7	+10.0
94.8	-20.0	97.1	-20.0	0	19.25
32.2	0.0	88.4	0.0		
0	+ 4.02				
Lauronitrile ($C_{12}H_{23}N$) + Butyl Alcohol ($C_4H_{10}O$)		Palmitonitrile ($C_{16}H_{31}N$) + Methyl Alcohol (CH_4O)			
Hoerr, Binkerd and al., 1944		Hoerr, Binkerd and al., 1944			
%	f.t.	%	f.t.	%	f.t.
97.3	-40.0	99.9	-40.0	85.6	20.0
93.7	-20.0	99.8	-20.0	11.5	30.0
30.3	0.0	99.2	0.0	0	31.40
0	+ 4.02	97.5	+10.0		
Myristonitrile ($C_{14}H_{27}N$) + Methyl Alcohol (CH_4O)		Palmitonitrile ($C_{16}H_{31}N$) + Ethyl Alcohol (C_2H_6O)			
Hoerr, Binkerd and al., 1944		Hoerr, Binkerd and al., 1944			
%	f.t.	%	f.t.	%	f.t.
99	-40.0	99.4	-40.0	75.1	20.0
98.6	-20.0	99.3	-20.0	9.11	30.0
94.6	0.0	98.3	0.0	0	31.40
		95.2	+10.0		

Palmitonitrile ($C_{16}H_{33}N$) + Isopropyl Alcohol
(C_3H_8O)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.4	-40.0	71.1	20.0
99	-20.0	9.1	30.0
97.8	0.0	0	31.40
93.4	+10.0		

Palmitonitrile ($C_{16}H_{33}N$) + Butyl Alcohol
($C_4H_{10}O$)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.3	-40.0	63.2	20.0
98.8	-20.0	7.9	30.0
96.5	0.0	0	31.40
89.2	+10.0		

Stearonitrile ($C_{18}H_{35}N$) + Methyl Alcohol
(CH_3O)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.8	10.0	88.2	30.0
98.4	20.0	0	40.88

Stearonitrile ($C_{18}H_{35}N$) + Ethyl Alcohol
(C_2H_6O)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.8	-40.0	95.8	20.0
99.7	-20.0	73.7	30.0
99.5	0.0	0	40.88
99.1			

Stearonitrile ($C_{18}H_{35}N$) + Isopropyl Alcohol
(C_3H_8O)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.9	-40.0	92.1	20.0
99.8	-20.0	65.0	30.0
99.2	0.0	0	40.88
97.8	+10.0		

Stearonitrile ($C_{18}H_{35}N$) + Butyl Alcohol
($C_4H_{10}O$)

Hoerr, Binkerd and al., 1944

%	f.t.	%	f.t.
99.8	-40.0	86.0	20.0
99.5	-20.0	54.7	30.0
98.6	0.0	0	40.88
96.4	+10.0		

Acrylonitrile (C_3H_3N) + Methyl Alcohol (CH_3O)

Lecat, 1949

%	b.t.
0	77.3
61.3	61.4 Az
100	64.7

Acrylonitrile (C_3H_3N) + Isopropyl alcohol
(C_3H_8O)

Lecat, 1949

%	b.t.
0	77.3
44	71.7 Az
100	82.55

Succinonitrile ($C_4H_4N_2$) + Ethyl Alcohol (C_2H_6O)

Schreinemakers, 1898

mol %	f.t.	sat. t.
0	54.5	-
15.6	25.6	-
30.6	-	13.4
36.7	-	19.3
53.5	-	29.8
64.5	-	30.8
72	-	31.2
84	-	28.2
87.5	-	24.6
90.1	-	20.0
92.4	-	13.5
94.1	10	-

Timmermans and Kohnstamm, 1909-10

$$C.S.T. = 24.30^\circ$$

$$dt/dp \text{ (} 10\text{-}160\text{kg/cm}^2 \text{)} = 0.005$$

Merzlin and Vassey, 1951

%	f.t.	sat.t.	E
13.2	19.0	-	11.5
21.3	11.5	-	"
25.7	-	18.5	"
31.8	-	24.5	"
48.2	-	29.5	"
60.1	-	30.0	"
70.9	-	28.5	"
80.3	-	23.5	"
87.1	-	11.5	"
90	6	-	-

Succinonitrile (C_4H_4N) Isobutyl Alcohol
($C_4H_{10}O$)

Timmermans and Kohnstamm, 1909-10

C.S.T. = 67.0°

dt/dp (5-155kg/cm²) = 0.004Glutaronitrile ($C_5H_6N_2$) + Methyl Alcohol (CH_4O)

Phibbs, 1955

mol %	Dv (cc/mole)	Q mix
	28°	
61.9	-	-373
50.0	-0.55	-
36.1	-	-374

Glutaronitrile ($C_5H_6N_2$) + Ethyl alcohol (C_2H_6O)

Phibbs, 1955

mol %	p	mol %	p
	20°		
100	44.6	62.0	41.8
89.1	43.5	57.7	40.2
87.5	42.3	36.5	37.3
77.0	42.1	34.3	36.3
75.7	41.3		
Dv max. (50 mol %) 28° -0.53 cc/mole			
mol %	Q mix	mol %	η
	28°		
57.4	-500	100.	1040
40.9	-498	67.1	1570
		36.9	2540

Glutaronitrile ($C_5H_6N_2$) + Propyl alcohol (C_3H_8O)

Phibbs, 1955

mol %	Q mix	mol %	Q mix
	28°		
83.5	-310	57.7	-480
69.7	-400	37.9	-552

Glutaronitrile ($C_5H_6N_2$) + Glycol ($C_2H_6O_2$)

Phibbs, 1955

mol %	Dv (cc/mole)	Q mix
	28°	
62.2	-	-411
50.0	+0.15	-
39.9	-	-428

Glutaronitrile ($C_5H_6N_2$) + Ethanolamine (C_2H_7ON)

Phibbs, 1955

mol %	η	mol %	η
28°			
100	16850	35.4	5730
64.4	7700	0	5670
mol %	Dv (cc/mole)	Q mix	
28°			
61.7	-	-324	
50.0	+0.26	-	
40.0	-	-342	

Glutaronitrile ($C_5H_6N_2$) + Ethylene cyanhydrin
(C_3H_5ON)

Phibbs, 1955

mol %	η	
28°		
100	3220	
64.8	3500	
35.3	4050	
mol %	Dv (cc/mole)	Q mix
28°		
54.9	-	-188
50.0	+0.07	-
26.0	-	-161

Tetracyanoheptane ($C_{11}H_{12}N_4$) + Ethyl Alcohol
(C_2H_6O)

Phibbs, 1955

80 % f.t. = 90.0

Tetracyanoheptane ($C_{11}H_{12}N_4$) + Ethylene
cyanhydrin (C_3H_5ON)

Phibbs, 1955

80 % f.t. = 48.0

Benzonitrile (C_7H_5N) + Ethyl Alcohol (C_2H_6O)

Wagner, 1903

%	d 30°	η (alcohol=1)
0	-	1.0768
20.46	0.95485	0.9091
43.00	0.90418	0.8785
54.68	0.87894	0.8949
75.41	0.83820	0.9210
87.36	0.81581	0.9539
93.501	0.80420	0.9784
96.772	0.79830	0.9883
98.380	0.79523	0.9958

Benzonitrile (C_7H_5N) + Isobutyl Alcohol
($C_4H_{10}O$)

Wagner, 1903

%	d 30°	η (alcohol=1)
0	-	0.3682
9.57	0.98110	0.3617
19.51	0.95766	0.3701
33.37	0.92722	0.3965
64.29	0.86502	0.5282
81.47	0.83325	0.6751
90.551	0.81716	0.8005

Benzonitrile (C_7H_5N) + Capryl Alcohol ($C_8H_{18}O$)

Lecat, 1949

%	b. t.
0	191.1
30	189.2 Az
100	195.2

Benzonitrile (C_7H_5N) + Isooctyl Alcohol
($C_8H_{18}O$)

Lecat, 1949

%	b. t.
0	191.1
88.5	180.0 Az
100	180.4

Benzonitrile (C_7H_5N) + Methoxydiglycol
($C_5H_{12}O_3$)

Lecat, 1949

%	b. t.
0	191.1
-	190.5 Az
100	192.95

Benzonitrile (C_7H_5N) + Ethyl Tartrate ($C_8H_{14}O_6$)

Rule, Barnett and Cunningham, 1933

mol %	(α) ^{mol} ₅₄₆₁
20°	
(5.094g/100cc)	67.9
25.3	40.18
46.6	30.80
58.8	26.62

Benzyl Cyanide (C_7H_7N) + Methyl Malate I
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.714	-5.23	-6.28	-7.04	-8.13	-8.59	-8.85
24.857	-5.43	-6.67	-7.28	-8.24	-8.84	-
12.4285	-5.63	-6.92	-7.48	-8.45	-9.09	-
5.160	-5.81	-7.36	-8.72	-9.11	-9.69	-10.08
2.580	-5.81	-7.36	-8.91	-9.30	-10.08	-

1,3,5-Tridodecylhexahydro-sym-triazine ($C_{39}H_{81}N_3$)
+ Ethyl alcohol (C_2H_6O)

Hoerr, Rapkin and al., 1956

%	I	f.t. II	III	sat.t.
99	-5	0	8	-
97	+8	15	21	21
95	8	15	21	57
90	8	15	21	80
80	8	15	21	-
60	-	-	21	-
40	-	-	21	-
30	-	-	21	88
20	-	-	21	70
10	-	-	21	21
0	9	16	25	-

Octylammonium chloride ($C_8H_{20}NCl$)
+ Ethyl alcohol (C_2H_6O)

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	f.t.		%	f.t.	
	I	II		I	II
72	2	-	50	20	-
65	8	3	40	40	-
60	12	12	30	72	-

Decylammonium chloride ($C_{10}H_{24}NCl$)
+ Ethyl alcohol (C_2H_6O)

Harwood, Ralston and Selby, 1941

%	f.t.	%	f.t.
75	8	40	46
70	14	30	65
60	24	20	77
50	35		

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	I	f.t.	II
86	3	-	-
84	8	-	-
78	15	-	-
72	22	12	12
60	30	23	23
50	38	35	35
40	46	-	-
30	70	-	-

Undecylammonium chloride ($C_{11}H_{26}NCl$) + Ethyl
alcohol (C_2H_6O)

Harwood, Ralston and Selby, 1941 (fig)

%	f.t.	%	f.t.
75	16	40	49
70	18	30	61
60	26	26	72
50	37		

Sedgwick, Hoerr and Ralston, 1945 (fig)

%	f.t.	%	f.t.
75	17	40	43
60	25	30	62
50	37		

Laurylammonium chloride ($C_{12}H_{28}NCl$) + Ethyl
alcohol (C_2H_6O)

Harwood, Ralston and Selby, 1941 (fig)

%	f.t.	%	f.t.
87.5	11	50	43
80	20	40	51
70	29	30	64
60	36	26	72

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	f.t.	
	I	II
94	3	-
90	17	7
80	28	20
70	37	27
60	44	35
50	48	43
40	58	53
30	68	67

%	f.t.	
	I	II
89.03	22.3	12.7
80.78	31.9	23.2
69.60	40.9	34.1
58.65	47.9	42.8
50.32	52.3	48.4
44.76	55.2	52.3
42.68	56.2	53.7
41.50	56.8	54.4
41	-	54.7
40.42	57.3	56.4
40	57.5	-
39.70	58.5	-
39.20	60.1	-
38.55	61.8	-
37.80	63.8	-
37.12	66.0	-
36.25	68.2	-
35.19	71.1	-
34.45	73.3	-
33.65	75.4	-
31.60	78.5	-

Tridecylammonium chloride ($C_{13}H_{27}NO$) + Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig)

%	f.t.	
	I	II
88.5	12	50
80	21	40
70	30	30
60	38	24

Sedgwick, Hoerr and Ralston, 1945 (fig)

%	f.t.	
	I	II
90	8	50
80	23	40
70	32	30
60	37	67

Tetradecylammonium chloride ($C_{14}H_{29}NO$) + Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig)

%	f.t.	
	I	II
94.5	11	50
90	22	40
80	34	30
70	41.5	25
60	48	75

Sedgwick, Hoerr and Ralston, 1945 (fig)

%	f.t.	
	I	II
98	5	-
95	18	8
90	30	23
80	40	35
70	47	43
60	52	47
50	58	54
40	65	62
30	72	70

Pentadecylammonium chloride ($C_{15}H_{31}NO$) + Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig)

%	f.t.	
	I	II
95.5	10.8	50
90	25	40
80	36	30
70	43	25
60	48	77

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	f.t.	
	I	II
97	8	60
95	17	50
90	27	40
80	36	30
70	43	70

Hexadecylammonium chloride ($C_{16}H_{33}NCl$)
+ Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
98	13.5	50	62
90	36	40	67
80	46	30	73
70	51.5	27.5	75.5
60	57		

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	I	f. t.	II
99	7	5	
95	32	26	
90	40	35	
80	48	45	
70	55	52	
60	60	57	
50	65	62	
40	67	67	
30	74	74	

Heptadecylammonium chloride ($C_{17}H_{35}NCl$)
+ Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
97.5	20	50	62
90	38	40	67
80	47	30	74
70	52	29	75
60	58		

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	f. t.	%	f. t.
95	28	60	58
90	40	50	63
80	47	40	65
70	52	30	75

Octadecylammonium chloride ($C_{18}H_{37}NCl$)
+ Ethyl alcohol (C_2H_5O)

Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
98	22	60	65
94	40	50	69
90	47	40	74
80	55	30	78
70	61	25	81.5

Sedgwick, Hoerr and Ralston, 1945 (fig.)

%	I	f. t.	II
99	10	14	
95	46	36	
90	52	48	
80	58	55	
70	63	60	
60	67	63	
50	72	70	
40	75	75	
30	78	78	

Dodecyltrimethylammonium chloride ($C_{15}H_{31}NCl$)
+ Methyl alcohol (CH_3O)

Reck, Harwood and Ralston, 1947

%	f. t.	%	f. t.
16.0	-40	113.8	0
31.0	-30	145.8	+10
35.2	-20	180.0	20
83.1	-10	226.6	30

Octadecyltrimethylammonium chloride ($C_{21}H_{43}NCl$)
+ Methyl alcohol (CH_3O)

Reck, Harwood and Ralston, 1947

%	f. t.	%	f. t.
5.7	-10	112.8	30
15.4	0	168	40
32.5	+10	252.1	50
71.6	20		

Octadecyltrimethylammonium chloride ($C_{21}H_{43}NCl$)
+ Ethyl alcohol (C_2H_5O)

Reck, Harwood and Ralston, 1947

%	f. t.	%	f. t.
3.7	-10	82.9	30
9.3	0	132.3	40
25.6	+10	209.8	50
43.1	20		

α -Naphthylamine hydrochloride ($C_{10}H_{10}NCl$)
+ Ethyl alcohol (C_2H_6O)

Hatem, 1949

%	χ	%	χ
18°			
100	-0.743	70	-0.728
90	-0.738	60	-0.726
80	-0.732	0	-0.710

Aniline hydrochloride (C_6H_5NCl) + Methyl alcohol
(CH_4O)

Kerler and Trilling, 1894

%	D b.t.	%	D b.t.
98.07	+0.215	91.77	0.687
96.27	0.252	91.59	0.7
95.06	0.398	90.50	0.807
94.77	0.327	89.36	0.9
94.75	0.38	86.60	1.188
93.55	0.511	86.05	1.194
93.28	0.55	84.63	1.38
92.89	0.562	83.04	1.499

Pipecoline hydrochloride ($C_6H_{14}NCl$)
+ Methyl alcohol (CH_4O)

Leithe, 1929

%	d	(α) _D
15°		
39.8	0.893	-5.4
14.8	0.834	-4.1
6.20	0.812	-4.0

2-Undecylbenzthiazole ($C_{18}H_{27}NS$) + Methyl alcohol
(CH_4O)

Du Brow, Hoerr and Harwood, 1952

%	f.t.	%	f.t.
99	-10	88.5	30
95.7	0	84.3	40
93.7	+10	76.7	50
91.4	+20		

2-Undecylbenzthiazole ($C_{18}H_{27}NS$)
+ Isopropyl alcohol (C_3H_8O)

Du Brow, Hoerr and Harwood, 1952

%	f.t.
99	-20
92.8	-10
70.9	0
33.3	+10

2-Heptadecylbenzthiazole ($C_{24}H_{39}NS$)
+ Isopropyl alcohol (C_3H_8O)

Du Brow, Hoerr and Harwood, 1952

%	f.t.
99	10
89.9	20
11.8	30

Anabasine hydroiodide ($C_{10}H_{15}N_2I$)
+ Ethyl alcohol (C_2H_6O)

Sadikov, Otroshchenko and Malikov, 1955

%	f.t.
95.82	0
94.1	20
88.91	78

Anabasine hydrochloride ($C_{10}H_{15}NCl$)
+ Ethyl alcohol (C_2H_6O)

Sadikov, Otroshchenko and Malikov, 1955

%	f.t.
70.04	0
60.00	20
39.74	78

ETHYLENEDIAMINE + PHENOL

701

XXXII. NITROGEN DERIVATIVES + PHENOLS .

Ethylenediamine ($C_2H_8N_2$) + Phenol (C_6H_6O)

Pushin and Sladovic, 1928

mol %	f. t.	E	min.
0	8.70	-	-
10	5.6	-	-
20	0.6	-15.30	-
23.8	-2.4	-14.10	-
30	-8.0	-14.2	-
35	-	-14.0	-
40	+0.1	-14.4	-
45	+15.5	-14.8	-
50	28.6	-16.2	-
55	41.2	-	-
60	48.9	-	-
66.6	52.8	-	-
70	52.3	+26.5	+0.8 (1+2)
71.5	50.6	+27	tr. t.
73.5	47.1	31.4	1.4 "
75	43.5	30.9	1.5 "
76	40.2	31.4	1.7 "
77	37.2	31.5	" "
78	33.8	31.6	1.9 "
79	31.8	-	2.0 "
80	31.8	-	2.1 "
82.5	30.6	15	1.0
85	26.8	19.6	1.2
87.5	21.3	20.1	2.5
90	23	20.2	2.3
92.5	29.9	19.6	1.5
95	34.6	16.5	0.7
100	40.8	-	-

(1+4) incongruent

 E_1 : 35 mol % -14° E_2 : 88.5 mol % +20.2°Ethylenediamine ($C_2H_8N_2$) + o-Cresol (C_7H_8O)

Pushin and Sladovic, 1928

mol %	f. t.	E	min.
0	8.7	-	-
10	4.5	-	-
15	0	-19.4	1.0
20	-2	-	-
25	-8.5	-18.2	2.1
30	-12.7	-	-
32.5	-	-17.2	2.9 E
37.5	-2	-17.8	2.1
40	+5.2	-	-
42.5	+9.7	-18.4	1.3
45	+16.3	-	-
50	29	-	-
55	37.8	-	-
60	43.8	-	-
65	47	-	-
66.6	47.2	-	-
70	45.1	-	-
75	37.6	+6.1	0.8 (1+2)
80	22.9	8	1.4
85	-	8.5	1.0 E
90	+19	6.6	1.0
100	29.5	-	-

Ethylenediamine ($C_2H_8N_2$) + p-cresol (C_7H_8O)

Pushin and Sladovic, 1928

mol %	f. t.	E	min.
0	8.7	-	-
10	-0.3	-14.7	1.0
20	-8.5	-16.6	1.9
25	-13	-16.4	2.5
30	-9.5	-15.6	2.9
35	+1.4	-15.6	1.7
40	12.2	-15.7	1.4
45	23.5	-13	1.0
50	34.5	-	-
55	44	-	-
60	50.6	-	-
66.6	53	-	-
70	51	-	- (1+2)
75	45.8	26.7	0.7
76.5	42.6	27	0.9
78.5	36.6	27.2	1.0
80	32.5	28.2	1.1
80.5	30.6	28.1	-
81.5	-	28.0	1.3
83.5	29.7	-	-
85	30.3	-	-
85.7	30.1	-	-
87.5	29.9	-	-
90	27.4	23.9	0.6 (1+6)
92	-	24.0	1.2
95	27	-	-
100	33	-	-
E_1 : 27 mol % -13°			
E_2 : 82 " " +28.2°			
E_3 : 92 " " 24°			

Ethylenediamine ($C_2H_8N_2$) + Salicyl Aldehyde
($C_7H_6O_2$)

Pushin and Dimitrijevitich, 1947

mol %	f. t.	E
0	9	-
10	1	1
20	31	-
30	55	-
40	75	-
50	88	-
60	102	-
66.7	106	-
68.5	102	-4
80	78	-4
88.5	48	-3
100	3	-
(1+2)		

Ethylenediamine ($C_2H_8N_2$) + Guaiacol ($C_7H_8O_2$)

Pushin and Sladovic, 1928

mol %	f. t.	E	min.
0	9.40	-	-
5	8	+3.50	-
7.5	7	3.2	1.1
10	6	3.5	-
12.5	10	4.8	1.9
15	15.3	4	-
20	23.2	3.2	1.3
25	30.2	1.5	1.2
30	35.8	-0.4	0.8
35	40.7	-0.5	0.7
40	45	-	-
42.5	46.8	-	-
45	48.8	-	-
47.5	50.1	-	-
50	51.5	-	(1+1)
52	51.5	-	-
54	51.5	-	-
55	52.2	50	-
57.5	54.2	-	-
60	55.8	-	-
62	56.9	-	-
64	57.5	-	-
66.6	57.5	-	(1+2)
70	56.8	-	-
72.5	59	-	-
75	62.4	57.2	-
77.5	64.5	56.7	-
80	65.4	42.6	-
82.5	66.3	41.7	-
85	66.5	-	(1+6)
87.5	66.5	-	-
90	65.8	24	-
92.5	64.8	26.5	-
95	62.5	27	-
97.5	59	27.5	-
99	51.2	27	-
100	-	28	-

Ethylenediamine ($C_2H_8N_2$) + Pyrocatechol ($C_6H_6O_2$)

Pushin and Sladovic, 1928

mol %	f. t.	E
0	8.7	-
5	7.2	-
10	5	-1.10
12.5	3.2	-2.4
15	-	+1
16.5	-	-1.4
18.5	-	-1.3
20	-	-1.4
21	10.6	+1.5
23	16	+1.6
25	22.5	-1
27	30	-0.7
30	39.6	-3.6
31.5	44.2	-1
33.3	49.5	-
35	52.2	-2.7
40	62	-
45	69.5	-
50	70.7	(1+1)
55	67.3	+53
57.5	64.5	+59.7
60	-	+59
61.5	62	59.6
62.5	63.8	52.9
65	68	-
66.6	69.2	(1+2)
67.5	67.7	-
69	66.8	-
70	65.2	-
71	64.8	-
72.5	66.8	-
74	67.6	-
75	67.6	(1+3)
76.5	67	-
77.5	66	48.3
79	63.4	60.8
80	-	62.5
82.5	70	62.4
85	77	64
87.5	85	63.2
90	90.5	61.8
95	98.2	-
100	102.7	-

E_1 : 15 mol % 2°
 E_2 : 60 " " 60°
 E_8 : 80 " " 64°

Aniline (C_6H_7N) + Phenol (C_6H_6O)

Heterogeneous equilibria .

Lecat, 1949

%	b. t.
0	184.35
42	186.2 Az
100	182.2

Paterno,1896			
%	D f.t.	%	D f.t.
99.4789	-0.39	89.0615	8.20
99.2129	1.35	87.8413	9.96
95.3664	3.57	82.9057	14.22
92.8155	5.60		
Schreinemakers,1899			
mol %	f.t.	mol %	f.t.
94	37.3	44.5	29.5 (1+1)
93.5	35.0	39.1	27.5 "
90.2	32.0	37.2	27.3 "
88.4	29.5	29.9	22.0 "
84.6	25.3	23.9	16.5 "
79.6	18.5	16.8	5.7 "
76.6	16.2 (1+1)	10.8	- 5.2 "
74.6	18.0	7.6	-11.4
69.9	22.7	5.2	- 9.5
66.3	24.9	3.1	- 8.1
62.7	27.7	1.5	- 7.1
54.8	29.9	0	- 6.1
Lidbury,1902			
%	f.t.	Crystallization velocity	
		7.5°	
55.8	30.181	0.68	
55.2	30.290	0.71	
54.1	30.427	0.73	
53.1	30.529	0.74	
52.2	30.589	0.76	
51.3	30.601	0.76	
50.7	30.600	0.76	
50.1	30.590	0.77	
49.5	30.555	0.75	
48.9	30.497	0.75	
47.5	30.350	0.73	
45.6	30.020	0.77	
Vinogradova, Tikhomirova and Efremov,1936			
%	f.t.	E	% f.t. E
100	41.3	-	45 29.3 -
95	36.3	-	40 27.5 -16.3
90	29.7	11.3	30 21.3 -13.0
85	23.3	13.3	25 12.5 -12.0
80	17.7	14.6	20 6.9 -11.7
75	17.0	14.6	15 4.7 -11.7
70	22.3	14.6	10 -10.4 -
60	28.5	13.5	5 - 8.0 -11.7
55	29.8	11.7	0 - 5.0 -
50	30.5	-	

Properties of phases					
Kremann and Ehrlich,1907 (fig)					
mol %	40°	d	62.5°		
100	1.058		1.046		
75	1.0495		1.034		
50	1.038		1.020		
25	1.022		1.004		
0	1.006		0.986		
Kremann and Ehrlich,1907 (fig)					
mol %	34-39°	41-50°	% Dv 32-41°	39-51°	50-62°
0	+0.470	+0.702	+0.691	+0.961	-
10	0.475	0.716	0.696	0.971	-
25	0.472	0.734	0.708	0.990	+0.983
32	0.486	0.741	0.712	1.000	1.000
40	0.485	0.740	0.719	1.000	1.010
46	0.487	0.744	0.720	0.999	1.021
50	0.486	0.746	0.721	1.001	1.016
60	0.484	-	0.721	1.000	0.966
68	0.482	0.741	0.717	1.000	1.017
75	0.483	0.739	0.705	-	1.016
90	0.482	0.731	0.705	0.981	-
100	0.480	0.714	-	-	-
Biron, Nikitin and Yakobson,1913					
mol %	d	mol %	d		
				35°	
100	1.0627	33.590	1.0318		
77.054	1.0548	25.470	1.0266		
67.035	1.0504	0	1.0088		
49.033	1.0412				
Thole, Mussell and Dunstan,1913					
%	d	%	d		
0	1.007	35°	67.9	1.049	
35.1	1.030		79.7	1.055	
51.4	1.040	100.0	-		
Springer and Roth,1930					
mol %	d	mol %	d		
0	0.992	54.5°	50	1.027	
10	0.999		54	1.030	
20	1.0063		60	1.033	
25	1.010		68	1.037	
32	1.014		75	1.041	
40	1.0197		80	1.042	
46	1.024		100	1.050	

Bramley, 1916 (fig.)

%	d			
	30°	40°	60°	80°
0.00	1.0131	1.0045	0.9872	0.9700
7.58	1.0185	1.0099	0.9925	0.9752
15.96	1.0242	1.0156	0.9982	0.9809
23.33	1.0292	1.0206	1.0032	0.9858
31.65	1.0347	1.0260	1.0086	0.9911
39.14	1.0394	1.0307	1.0133	0.9959
47.17	1.0442	1.0355	1.0180	1.0005
54.00	1.0448	1.0394	1.0220	1.0047
61.84	1.0521	1.0434	1.0259	1.0085
69.28	1.0557	1.0470	1.0296	1.0122
76.36	1.0590	1.0504	1.0330	1.0156
84.80	1.0617	1.0531	1.0358	1.0185
92.50	1.0646	1.0561	1.0388	1.0215
100	1.0668	1.0584	1.0414	1.0242

Bramley, 1916

%	d	
	20°	125°
0.00	1.0219	0.9288
7.94	1.0276	0.9342
15.31	1.0326	0.9390
23.34	1.0380	0.9436
31.28	1.0434	0.9482
39.39	1.0485	0.9527
47.56	1.0532	0.9571
53.81	1.0569	0.9606
62.50	1.0611	0.9648
69.52	1.0644	0.9690
77.02	1.0675	0.9727
85.02	1.0704	0.9762
92.28	1.0729	0.9795
100	1.0750	0.9828

Kremann and Ehrlich, 1907

mol %	η (water at 0°=1)		
	39°	54.5°	74°
0	2.050	1.113	0.882
10	2.228	1.230	-
25	2.753	1.450	1.059
32	3.140	1.542	1.110
40	3.502	-	-
46	3.800	1.759	1.190
50	4.061	1.833	1.221
54	4.231	1.853	1.222
60	4.360	1.920	1.244
68	4.419	1.941	1.248
75	4.318	1.952	1.250
90	3.790	1.891	-
100	-	1.822	1.223

Thole, Mussell and Dunstan, 1913

%	η	
	35°	
0	2790	67.9
35.1	5390	71.7
51.4	6540	100
		7210
		6920
		5550

Bramley, 1916 (fig.)

%	η			
	30°	40°	60°	80°
0	3145	2405	1540	1100
7.58	3660	2740	1690	1175
15.96	4340	3150	1880	1280
23.33	5070	3610	2083	1375
31.65	5950	4100	2285	1480
39.14	6850	4610	2485	1570
47.17	7700	5100	2670	1662
54.00	8360	5450	2790	1720
61.84	8890	5730	2900	1768
69.28	9070	5830	2940	1793
76.36	8890	5730	2920	1777
84.80	8340	5460	2835	1745
92.50	7680	5110	2690	1670
100.00	7090	4760	2520	1580

%	η	
	20°	125°
0	4280	637
7.94	5090	666
15.31	6100	693
23.34	7350	723
31.28	8890	749
39.39	10590	770
47.56	12150	788
53.81	13200	799
62.50	14180	811
69.52	14470	817
77.02	14210	818
85.02	13310	813
92.28	12210	797
100.00	11040	770

Springer and Roth, 1930

mol %	η	
	(water at 0°=1)	
0	54.5°	1.3289
20		1.6526
40		2.0393
60		2.298
80		2.3986
100		2.3972

Vinogradova, Tikhomirova and Efremov, 1935					Howell and Robinson, 1933			
%	d	σ	d	σ	%	κ	%	κ
	19.5°		45°				50°	
100	-	-	1.0579	37.1	0	0.00034	65.22	0.00334
90	1.0723	35.38	1.0531	35.7	5.52	.00037	69.14	.00366
80	1.0707	35.83	1.0495	35.2	12.84	.00046	72.46	.00389
75	1.0678	35.80	1.0469	-	19.86	.00065	77.87	.00409
70	1.0652	35.75	1.0452	-	31.48	.00094	82.32	.00416
67.5	1.0635	35.87	1.0442	-	32.82	.00096	82.59	.00418
60	1.0609	36.22	1.0409	35.1	35.96	.00114	86.66	.00406
50	1.0560	36.65	1.0352	35.2	41.24	.00143	90.31	.00380
40	1.0510	37.28	1.0292	35.6	45.34	.00180	93.14	.00337
30	1.0451	37.95	1.0239	35.3	47.96	.00194	96.33	.00171
25	1.0425	38.36	1.0204	-	52.75	.00232	98.87	.00093
20	1.0385	38.74	1.0175	-	55.18	.00260	100	.00021
10	1.0313	39.49	1.0100	37.6	60.68	.00304		
0	1.0252	40.79	1.0033	38.1				
%	d	η	d	η	d	η	Howell and Yackson, 1934	
	25°		40°		50°		%	mol %
100	-	-	1.0626	4150	1.0532	2680		ϵ
90	1.0687	8870	1.0570	4440	1.0492	2980		50°
80	1.0657	9650	1.0536	4760	1.0454	3200	0	0
75	1.0632	9810	1.0515	4970	1.0437	3270	10.00	9.90
70	1.0618	10000	1.0497	4970	1.0408	3290	20.01	19.84
67.5	1.0608	10100	1.0484	4830	1.0401	3200	30.00	29.78
60	1.0567	9920	1.0450	4810	1.0367	3180	40.00	39.74
50	1.0515	9000	1.0391	4490	1.0313	3090	45.01	44.75
40	1.0460	7770	1.0336	4170	1.0248	2980	50.02	49.75
30	1.0405	6350	1.0280	3640	1.0198	2620	55.00	54.74
25	1.0375	5710	1.0217	3370	1.0161	2490	57.50	57.24
20	1.0337	5140	1.0215	3020	1.0135	2300	59.95	59.69
10	1.0263	3940	1.0111	2560	1.0059	1980	62.47	62.22
0	1.0203	3190	1.0075	2120	0.9990	1690	64.97	64.73
%	d	η	d	η	Kremann, 1910 (fig.)			
	75°		100°		t	U	t	Q mix
100	1.0324	1280	1.0118	800	50 mol %			
90	1.0285	1350	1.0078	750	33.7	-	53.7	5.71
80	1.0250	1410	1.0030	770	40.3	0.573	57.0	5.52
75	1.0223	1430	1.0009	770	55.7	0.461	61.9	5.23
70	1.0198	1420	0.9990	780	65.8	0.454	73.4	5.15
67.5	1.0190	1400	0.9979	770	74.9	0.426	80.2	4.88
60	1.0153	1410	0.9939	770	99.4	0.407	89.4	4.68
50	1.0104	1370	0.9894	760				
40	1.0015	1340	0.9788	800(sic)				
30	0.9957	1320	0.9724	760				
25	0.9927	1280	0.9693	770				
20	0.9900	1210	0.9667	740				
10	0.9826	1090	0.9593	680				
0	0.9757	970	0.9524	630				
Pushin, Matavulj and Rikovski, 1943								
mol %	n_D	mol %	n_D					
	45°							
0	1.5729	60	1.5551					
10	5704	70	5521					
20	5680	80	5482					
30	5650	90	5440					
40	5618	100	5402					
50	5588							

Aniline (C_6H_7N) + o-cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	184.35
92	191.25 Az
100	191.1

Kremann, 1916 (fig.)

%	f. t.	%	f. t.
100	30.4	50	8.3
89.9	22.1	49.1	8.3
81.2	12.9	43.4	7.9
77.7	8.3	35.8	1.3
72.7	1.7	28.5	-7.1
68.3	4.2	20.5	-16.7
63.9	7.5	11.4	-12.5
57.4	8.3	5.4	-9.8
55.6	8.3	0	-6.8

(1+1)

Pushin, Matavulj and Rikovski, 1948

mol %	gr %	n_D
	40°	
0	0	1.5755
10.2	11.7	5713
19.5	22	5677
29.2	32.3	5636
40.6	44.2	5596
50.3	54	5554
62.6	66.7	5505
70.5	73.4	5477
80	82.3	5443
90.5	91.7	5400
100	100	5364

Aniline (C_6H_7N) + m-Cresol (C_7H_8O)

Kremann, 1906 (fig)

%	f. t.	%	f. t.
100	4.2	54.4	-14.6
95.5	0.0	46.8	-14.6
92.7	-4.6	39.2	-18.7
84.2	-12.5	29	-26.7
78.3	-20.9	20.7	-23.4
73.7	-30.2	6.8	-10.0
67.4	-23.8	0	-6.6
61.3	-15.8		

(1+1)

Kremann and Ehrlich, 1907

mol %	d	61.5°
	0°	
100	1.049	1.003
75	1.0495	1.002
55	1.049	1.0005
50	1.048	1.000
45	1.0475	0.999
25	1.044	0.995
0	1.0385	0.987

Tsakalotos, 1908

mol %	d	η
	25°	
0	1.018	3721
30	1.022	6799
37.4	1.024	8194
46.1	1.026	9622
54.9	1.029	11120
63.1	1.030	12200
77.8	1.030	12310
100	1.031	12910

Biron, Nikitin and Yakobson, 1913

mol %	d	mol %	d
	20°		
100	1.0340	31.565	1.0289
70.218	1.0337	22.342	1.0271
64.046	1.0334	0	1.0217
48.634	1.0318		

Trew and Spencer, 1936

mol %	d	n_D
	28°	
0	1.0147	1.58170
12.2	1.0187	1.57577
13.7	1.0192	1.57502
22.0	1.0212	1.57117
37.1	1.0232	1.56431
45.4	1.0273	1.56075
57.3	1.0278	1.55579
66.2	1.0281	1.55187
77.6	1.0287	1.54692
88.6	1.0290	1.54228
100	1.0293	1.53812

mol %			d		x	
25°						
0	1.0182	0.662				
12.02	1.0214	0.665				
26.79	1.0250	0.665				
42.75	1.0273	0.668				
47.88	1.0282	0.669				
57.86	1.0309	0.670				
75.13	1.0315	0.671				
87.62	1.0303	0.671				
100	1.0302	0.672				
Kremann and Ehrlich,1907						
mol %		η (water at 0°=1)				
	0°	34.10°	64.0°	76.3°	95.9°	
100	46.85	4.517	1.553	1.216	0.945	
90	50.92	4.593	1.611	1.230	0.946	
75	49.61	4.542	1.569	1.225	0.933	
65	45.63	4.356	1.533	-	-	
55	37.38	3.987	1.473	1.173	0.915	
50	33.66	3.771	-	-	-	
45	28.57	3.495	1.373	1.128	0.878	
35	19.44	2.970	1.279	-	-	
25	13.17	2.515	1.194	1.015	0.807	
10	7.77	1.892	1.057	-	-	
0	5.697	1.619	0.966	0.863	0.723	
Pushin, Matavulj and Rikovski,1948						
mol %		gr %		n _D		
25°						
0	0	1.5835				
5.1	5.9	5806				
10.3	11.7	5782				
14.9	16.9	5756				
20.4	22.2	5727				
29.6	32.2	5688				
41	46.8	5638				
45.8	49.6	5610				
50.6	54.3	5591				
56	59.8	5569				
60.8	64.3	5548				
70	73.9	5505				
80	82.1	5469				
90	91.2	5430				
100	100	5392				
Trew and Spencer, 1936.						
mol %		U		Q mix		
0	0.448	-				
17.1	0.462	1.97				
39.9	0.473	3.88				
52.9	0.465	4.85				
68.7	0.463	4.66				
84.8	0.463	3.06				
100	0.515	-				

Aniline (C ₆ H ₇ N) + p-cresol (C ₇ H ₈ O)							
Kremann,1906							
%		f.t.					
%		f.t.					
100	33.2	45	18.3				
88.7	20.8	38.2	15.4				
77	5.8	34.2	12.1				
69	14.6	24.5	3.7				
63.6	16.7	13.9	-14.2				
57.8	18.8	4.6	-10.0				
52.5	19.2	0	- 6.7				
45.3	18.3	(1+1)					
Philip,1903							
%		f.t.					
%		f.t.					
100	33.4	53.9	21.2				
92.3	24.8	53.3	21.1				
83.5	8.7	50.9	21.0				
E	9.4	48.1	20.6				
75.6	16.8	42.7	18.9				
71.2	14.3	36.6	15.8				
61.3	20.0						
Thole, Mussell and Dunstan,1913							
%		d					
25°		η					
d		50°					
η							
0	1.020	3620	0.992	2010			
30.0	1.022	6950	0.997	2930			
53.6	1.027	10700	1.001	3975			
62.7	1.028	12400	1.004	4260			
79.5	1.028	14400	1.005	4620			
90.0	1.029	14500	1.005	4710			
100.0	-	-	1.005	4620			
Biron, Nikitin and Yakobson,1913							
mol %		d		mol %		d	
20°							
100	1.0342	32.692	1.0296				
69.218	1.0342	31.844	1.0295				
65.457	1.0340		1.0279				
49.459	1.0324	24.502	1.0217				

Pushin, Matavulj and Rikovski, 1948

mol %	gr %	n_D
	40°	
0	0	1.5755
10	11.5	5705
20	22.5	5657
30.3	32.4	5612
40	43.6	5566
45	48.8	5546
50.2	54.2	5522
55.5	59.1	5499
60.5	63.9	5481
70	72.9	5439
79.5	81.9	5396
90	91.3	5358
100	100	5318

Aniline (C_6H_7N) + Cresol (C_7H_8O)

Ampola and Rimatori, 1897

%	f. t.	%	f. t.
0	- 5.96	4.21	- 8.46
0.41	- 6.22	8.10	-10.25
1.40	- 6.79	9.36	-11.86
2.61	- 7.54	11.59	-13.62

Aniline (C_6H_7N) + Xylenol-1,2,3 ($C_8H_{10}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 7	55	38.2
4	- 8.5 E	57	42
10	+10	70	52.5
20	25	80	61
30	34	90	68
40	38	100	71.5
(1 + 1)			

Aniline (C_6H_7N) + Xylenol-1,2,5 ($C_8H_{10}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 8	60	53
10	-11 E	70	61
20	+11	80	67
30	+19	90	71
40	+24	100	75
50	+27		
(1 + 1)			

Aniline (C_6H_7N) + Xylenol-1,3,4 ($C_8H_{10}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 7	60	33
11	-14 E	70	44
20	0	80	55
30	+ 8	90	62
40	+10	100	64
49	+11		(1 + 1)

Aniline (C_6H_7N) + Xylenol-1,3,5 ($C_8H_{10}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 7	50	+ 6 E
10	-15	60	+35
15	-17 E	70	+42
20	- 7	80	+51
30	+ 3	90	+58
40	+ 5	100	+63
(1+1)			

Aniline (C_6H_7N) + 2,3,5-trimethylphenol
($C_9H_{12}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 7	50	+58
5	- 7	60	+68
6	- 8	70	+75
10	+ 3	80	+82
20	+18	90	+85
30	+33	100	+93
40	+45		

Aniline (C_6H_7N) + 3-Methyl-5-Ethylphenol
($C_9H_{12}O$)

Parant, 1950 (fig)

mol %	f. t.	mol %	f. t.
0	- 7	60	+20
10	-12 E	70	+30
20	+ 1	80	+35
30	+ 8	90	+47
40	+10	100	+50
50	+ 9 E		(3+2)

Aniline (C_6H_7N) + Thymol ($C_{10}H_{14}O$)

Ampola and Rimatori, 1897

%	f.t.	%	f.t.
0	-5.96	4.98	- 8.02
0.55	-6.22	9.62	- 9.38
1.46	-6.57	11.47	-10.27
2.90	-7.125	14.04	-11.46
4.25	-7.66		

Pushin, Marich and Rikovski, 1948

mol %	f.t.	E
100	51	-
90	45	6
80	34	9
70	22	10
65	15	10
60	10	10
55	11	-
50	12	12
47	11	-
40	8	-15
30	2	-15
20	- 5	-14
10	-13	-13
5	-10	-
0	- 6	(1+1) -

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	mol %	n_D
	60°		
0	1.5650	60	1.5216
10	5554	70	5170
18.2	5483	80	5125
31	5390	90	5082
40.8	5327	100	5041
50.7	5265		

Aniline (C_6H_7N) + Carvacrol ($C_{10}H_{14}O$)

Ampola and Rimatori, 1897

%	f.t.	%	f.t.
0	-5.96	6.60	- 8.65
0.52	-6.20	9.25	- 9.81
1.44	-6.55	11.00	-10.58
2.60	-7.01	13.24	-11.58
3.77	-7.50	16.03	-12.94
4.71	-7.86	19.77	-13.22
5.85	-8.40		

Aniline (C_6H_7N) + Guaiacol ($C_7H_8O_2$)

Pushin and Vajč, 1926

%	f.t.	E	min.
100	28	-	-
90	20.8	-	-
85	17.2	9.0	-
80	12.5	10.2	-
70	13.2	-	-
67	13.5	10.3	-
62	15	-	-
60	15.5	-	-
50	17	-	-
40	15	-13.5	0.13
35	13.6	-	-
30	9.6	-15.8	-
20	0.1	-13.4	0.41
15	-3.8	-12	0.94
10	-	-12.7	1.20
5	-9.7	-13.8	0.18
0	-6	-	(1+1) -

Pushin and Pinter, 1929

mol %	d	mol %	d
0	1.1236	30° 60	1.0654
10	1.1158	70	1.0537
20	1.1079	80	1.0422
30	1.0981	90	1.0276
40	1.0881	100	1.0140
50	1.0785		

Pushin and Pinter, 1929

mol %	n	mol %	n
	30°		
0	4450	50	5090
10	4740	55	4940
20	4900	60	4860
30	5110	70	4580
35	5150	80	4230
40	5230	90	4610
45	5120	100	3040

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	mol %	n_D
	30°		
0	1.5808	60	1.5561
10	.5773	70	.5517
20	.5727	80	.5472
30	.5683	90	.5430
40	.5643	100	.5386
50	.5601		

Aniline (C_6H_7N) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
100	105.0	40.9	34.0
92.8	100.0	38	32.0
82.1	91.5	37.8	31.0
74	82.5	33.5	26.0
68.2	74.0	30.4	21.0
63.3	68.0	27.7	+14.0
57.4	56.0	23.6	+ 4.8
51.2	39.0	18.1	- 5.0
45	37.0	5.8	- 9.0
44.6	37.0	0	- 6.3

Aniline (C_6H_7N) + Resorcinol ($C_6H_6O_2$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
100	110.0	68.4	77.5
91.1	102.0	61.0	65.0
76.9	89.5	54.5	50.0
		0.0	- 6.0

Aniline (C_6H_7N) + Hydroquinone ($C_6H_6O_2$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0	- 6.5	29.4	88.0
3.6	+54.5	34	89.0
5.1	63.0	34.8	88.5
7.5	68.5	35.9	88.5
9.7	73.5	38.8	95.0
12.5	76.5	39	94.5
16.2	81.0	41.4	100.0
17.1	81.0	50.8	121.0
20.7	85.0	54.2	126.0
23.5	87.0	57.2	131.0
23.5	87.5	60.5	135.0
23.9	86.5	63.5	138.0
27.6	87.5	68.5	144.0
28.5	88.5		

(1+1)

Aniline (C_6H_7N) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f.t.	E	%	f.t.	E
100	126.3	-	46.27	48.6	-
92.60	121.0	-	44.10	48.7	-
86.24	116.4	-	41.62	49.0	-
80.51	112.3	-	39.02	48.9	-
75.81	107.6	-	36.74	48.0	-
70.68	101.1	-	33.76	46.6	-
65.73	94.0	-	32.18	45	-
61.43	86.8	48.0	24.24	36	-
58.38	80.3	"	18.80	26	-
54.96	73.0	-	15.87	+20	-13.0
51.36	57.5	48.4	7.87	-12	"
50.03	54.0	"	2.62	- 8	-
48.73	48.5	"	0	- 6.7	-

(2+1)

Aniline (C_6H_7N) + o-Chlorphenol (C_6H_5OCl)

Bramley, 1916

gr %	mol %	f.t.
0	0	- 6.5
3.15	2.30	- 7.8
7.23	5.35	- 9.5
12.21	9.15	-10.4
16.45	12.50	- 2.0
22.44	17.3	+ 7.85
29.08	22.9	15.15
35.82	28.75	20.7
42.99	35.35	25.65
49.50	41.5	28.06
57.72	50.2	29.35
62.13	54.25	28.95
68.90	61.6	26.35
76.05	69.65	20.85
81.02	75.5	15.10
85.41	80.5	6.2
89.71	86.3	+ 0.3
93.65	91.45	3.9
96.85	94.35	5.45
100	100	8.00

E_1 : 9.7 mol % - 12.0
 E_2 : 83.8 " " - 1.75 (1+1)

Pushin and Rikovski, 1949

mol %	f.t.	mol %	f.t.
0	- 6	55	30
30	24	60	28.5
40	29	70	22
43.5	30	100	7
50	30.5		

Thole, Mussell and Dunstan, 1913

%	25°	d	50°	25°	η	50°
100	1.235		1.203	4110		2015
91.6	1.216		1.184	5380		2570
84.1	1.199		1.168	6710		2880
59.6	1.146		1.118	9510		3300
58.2	1.142		1.114	9630		3350
50.05	1.134		1.105	9440		3260
38.6	1.099		1.072	7710		3040
29.7	1.079		1.053	6490		2870
0	1.022		0.992	3620		2010

Bramley, 1916

%	10°	20°	d	30°	40°
0.0	1.0350	1.0218	1.0131	1.0045	
15.54	0644	0555	0466	0377	
28.94	0957	0865	0773	0681	
40.16	1220	1124	1028	0932	
46.61	1375	1278	1181	1084	
51.68	1496	1397	1298	1199	
56.87	1617	1517	1417	1317	
60.61"	1703	1602	1501	1400	
65.18	1811	1709	1607	1505	
68.50	1893	1790	1689	1584	
77.80	2107	2002	1897	1792	
89.65	2384	2275	2166	2057	
100	2626	2512	2399	2284	

	60°	80°	110°	150°
0.0	0.9872	0.9700	0.9430	0.9052
15.54	1.0197	1.0017	9739	9354
28.94	0496	0311	1.0019	9620
40.16	0740	0548	0248	9839
46.61	0889	0694	0389	9972
51.68	1001	0803	0493	1.0069
56.87	1117	0917	0604	0177
60.61	1197	0994	0679	0249
65.18	1301	1097	0775	0339
68.50	1377	1170	0844	0404
77.80	1582	1372	1039	0590
89.65	1839	1621	1281	0823
100	2060	1834	1490	1028

%	10°	20°	η	30°	40°
0.0	6300	4280		3145	2405
15.54	9035	5780		4050	2945
28.94	13150	7740		5060	3540
40.16	17860	9600		5930	3990
46.61	20450	10560		6390	4200
51.68	22400	11240		6720	4330
56.87	23650	11660		6930	4390
60.61	23950	11760		6950	4400
65.18	23530	11480		6860	4340
68.50	22480	10960		6700	4240
77.80	17550	9040		5800	3790
89.65	11180	6300		4310	3010
100	6390	4210		3080	2320

	60°	80°	110°	150°
0.0	1543	1100	709	446
15.54	1790	1222	781	498
28.94	2015	1327	842	539
40.16	2195	1407	886	568
46.61	2275	1443	901	577
51.68	2325	1462	909	582
56.87	2350	1470	912	585
60.61	2350	1470	912	585
65.18	2340	1460	907	584
68.50	2320	1444	901	581
77.80	2145	1368	873	572
89.65	1825	1222	820	559
100	1513	1070	760	546

Ellyett, 1937

mol %	n_D	d
	20°	
0.000	1.5866	1.0218
7.043	1.5858	1.0423
12.421	1.5851	1.0574
27.430	1.5829	1.0992
40.874	1.5806	1.1330
49.298	1.5787	1.1526
54.199	1.5776	1.1635
59.880	1.5759	1.1765
72.204	1.5718	1.2011
80.781	1.5685	1.2175
90.772	1.5641	1.2355
96.831	1.5617	1.2459
100.000	1.5602	1.2512

Peel, Madgin and Briscoe, 1928

$$50 \text{ vol } \% \quad \begin{aligned} D_v &= -1.0^\circ \\ D_t &= +13.85^\circ \end{aligned}$$

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	mol %	n_D
0	1.5834	25°	60
10	5815	70	1.5699
20	5793	80	5669
30	5775	90	5632
40	5752	100	5601
50	5727		5566

Madgin, Peel and Briscoe, 1928

$$50 \text{ vol } \% \quad \begin{aligned} 5^\circ \quad D_t &= +15.2^\circ \\ 30^\circ &+12.1^\circ \end{aligned}$$

Ellyett, 1937

mol %	U	mol %	U
25°			
0.00	0.496	78.43	0.446
17.05	0.493	90.99	0.420
45.40	0.483	100.00	0.392
63.80	0.466		
35°			
0.00	0.4994	56.82	0.471
9.04	0.499	68.21	0.461
27.77	0.491	88.18	0.425
40.76	0.484	100.00	0.495
78°			
0.00	0.5295	67.93	0.469
10.10	0.525	88.02	0.437
34.25	0.506	100.00	0.415
mol %	Q mix	mol %	Q mix
20°			
31.55	1615	49.74	1874
42.59	1831	59.65	1754
45.62	1862		
25°			
7.60	474	49.39	1804
14.21	831	53.27	1795
20.01	1117	59.65	1689
27.10	1391	68.08	1447
34.20	1603	77.43	1098
42.03	1765	79.39	1000
46.33	1807	90.99	466
47.42	1801	90.99	467
47.44	1792		
35°			
5.95	347	48.98	1679
12.21	685	49.68	1693
24.20	1185	56.37	1617
31.35	1425	57.25	1603
39.09	1612	63.05	1508
41.41	1650	73.53	1183
47.06	1676	84.12	752
47.79	1679	92.41	370
78°			
6.54	259	55.71	972
13.73	497	57.68	962
24.67	776	62.69	921
33.95	891	73.47	756
39.37	972	83.24	467
42.65	1008	92.98	199
47.47	1005		

Aniline (C_6H_7N) + m-Chlorphenol (C_6H_5OCl)

Thole, Mussell and Dunstan, 1913

%	25° d	50°	25° n	50°
100	1.268	1.237	11550	3980
91	1.238	1.210	11850	4135
80.65	1.207	1.180	12460	4340
69.9	1.131	1.153	13220	4490
59.7	1.153	1.126	10830	4030
39.9	1.104	1.077	8110	3210
24.6	1.071	1.045	6130	2650
0	1.022	0.992	3620	2100

Aniline (C_6H_7N) + p-Chlorphenol (C_6H_5OCl)

Thole, Mussell and Dunstan, 1913

%	25° d	50°	25° n	50°
100	1.249	1.244	16800	4990
92.2	1.228	1.223	17200	5140
84.6	1.209	1.199	17100	5370
77.8	1.185	1.179	15700	5370
70.1	1.166	1.158	14100	5130
62.8	1.154	1.140	13100	4800
58.2	1.133	1.128	11200	4510
49.8	1.084	1.107	7050	4190
29.8	-	1.058	-	3070
9.7	1.037	1.012	4520	2210
0	1.022	0.992	3620	2010

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	mol %	n_D
40°			
0	1.5755	59.5	1.5660
9.8	5738	69.6	5644
21	5721	78.7	5630
31	5706	88.7	5612
40	5692	100	5593
49	5677		

Aniline (C_6H_7N) + m-Aminophenol (C_6H_7ON)

Kremann and Hohl, 1920

%	f.t.	%	f.t.
100	118.5	30.4	39.0
97.2	116.5	25.0	26.5
88.4	111.0	23.1	23.0
84.1	108.6	20.4	9.0
78.5	103.0	15.5	-11.5
72.9	98.2	12.3	-14.8
67.2	91.7	8.8	-12.5
61.4	85.0	6.5	-11.0
53.7	75.0	3.9	-9.0
46.4	63.5	1.6	-8.5
36.9	50.0	0	-6.0

Aniline (C_6H_7N) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Philippi, 1908

100 mol %			50 mol %		
t	d	σ	t	d	σ
55.0	1.2838	40.37	21.0	1.1784	47.19
72.0	2656	38.71	42.5	1586	44.64
90.5	2460	36.95	65.0	1380	42.13
71.0	2666	38.94			
55.5	2832	40.45			

Kremann and Rodinis, 1906

mol %	f.t.	mol %	f.t.
100	46.0	54.1	13.5
95.3	44.0	49.3	10.0
88.2	38.0	48.8	10.0
79.8	32.0	43.3	5.0
76.9	30.0	42.4	5.5
71.9	27.0	36.7	-1.0
71.1	26.0	34.5	-2.5
67.9	23.0	29.0	-7.5
65.8	22.0	19.8	-13.5
64.8	21.0	12.0	-10.5
61.5	18.5	6.2	-8.7
59.9	17.5	2.2	-7.0
57.4	16.0	0.0	-6.3
55.1	15.5		

Bramley, 1916

%	30°	40°	d	60°	80°
0.00	1.0131	1.0045	0.9872	0.9700	
10.88	0376	0288	1.0109	9933	
22.36	0655	0566	0382	1.0202	
32.77	0924	0883	0645	0460	
42.00	1175	1080	1888	0699	
51.28	1445	1350	1150	0955	
60.52	1717	1620	1419	1222	
68.32	1968	1867	1663	1462	
77.11	2263	2162	1954	1748	
85.04	2531	2428	2216	2008	
91.49	(1.2745)	2642	2429	2218	
100.00	(1.3045)	2942	2712	2482	

% 30° 40° η 60° 80°

0.00	3145	2405	1543	1100
10.88	2972	2322	1512	1094
22.36	2863	2257	1486	1086
32.77	2805	2224	1477	1081
42.00	2802	2215	1478	1088
51.28	2828	2230	1494	1100
60.52	2881	2272	1525	1127
68.32	2952	2328	1564	1155
77.11	3063	2415	1622	1199
85.04	3225	2515	1688	1248
91.49	3300	2610	1741	1289
100.00	3650	2755	1825	1348

Aniline (C_6H_7N) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
100.0	96.0	52.7	22.5
92.1	89.0	49.2	20.5
85.7	82.0	44.5	17.0
74.5	65.5	40.6	13.0
70.9	60.0	36.1	6.5
68.0	55.0	13.5	-10.0
64.6	46.5	5.0	-7.0
61.0	36.0	0.0	-6.3
57.9	26.0		

Kremann and Philippi, 1908

100 mol %			50 mol %		
t	d	σ	t	d	σ
115.5	1.256	42.28	27.5	1.1946	50.31
138.5	.228	40.14	46.0	.1784	47.86
161.5	.200	38.06	61.0	.1656	45.79
140.0	.225	40.32	78.0	.1506	43.90

Aniline (C_6H_7N) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
100.0	113.0	46.7	39.0
92.2	104.0	45.9	38.5
85.4	96.5	39.5	33.5
79.5	86.5	34.7	28.0
73.0	75.0	29.7	20.0
71.7	73.0	28.8	20.0
68.9	67.0	22.2	4.0
66.8	61.0	18.0	-12.0
62.5	49.0	13.2	-17.5
60.2	42.0	5.0	-10.5
54.8	42.0	1.8	-7.5
52.3	42.0	0.0	-6.3

Kremann and Philippi, 1908

100 mol %			50 mol %		
t	d	σ	t	d	σ
131.0	1.327	46.79	41.5	1.2022	48.56
165.0	.259	42.02	61.2	.1854	45.45
151.0	.289	43.84	80.0	.1690	43.50
133.0	.323	46.01			

Aniline (C_6H_7N) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Kremann, 1906

%	f. t.	%	f. t.
100.0	110.5	55.2	73.5
95.1	106.0	41.9	69.0
89.3	101.0	30.7	60.0
76.7	86.5	30.0	60.0
71.1	80.0	21.1	51.0
69.4	78.0	13.8	42.0
67.1	74.0	8.9	22.0
64.8	75.0	3.4	- 7.0
58.0	74.0	1.0	- 7.0
57.9	74.0	0.0	- 6.5

Aniline (C_6H_7N) + α -Naphthol ($C_{10}H_8O$)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	E
0	- 6.0	-
1.3	- 7.0	-
2.2	- 7.7	-
4.2	- 8.5	-
6.0	-10.0	-
7.7	-	-14.0
12	- 8.7	-
15	+ 6.0	-
17.6	+11.0	-14.0
21.3	+16.0	-
22.9	+17.0	-
25.7	+19.5	-
29.1	+22.5	-
33.8	+25.0	-
37.9	+27.2	-
39.5	+27.5	-
43.6	+27.8	-
46.9	+53.1	+26.0
48.3	+27.2	+26.5
51.9	+48.1	+30.0
53.2	+29.9	-
55.9	+44.1	+31.5
58.7	+41.3	+32.0
63.8	+36.2	+31.5
68.4	+43.5	-
73.5	+53.5	-
78.4	+62.8	-
84.2	+71.8	-
89.3	+78.5	-
95.2	+86.2	-
100	+90.5	-

(1+1)

(2+1)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	- 7	50	+34 E
5	- 9 E	60	+53
10	+12	70	+67
20	+23	80	+78
30	+30	90	+83
40	+33	100	+90

(1+1)

Aniline (C_6H_7N) + β -Naphthol ($C_{10}H_8O$)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	E
0	- 6.0	-
3.5	- 6.5	-6.5
8	+28.0	-7.0
11	40.0	-
16.4	50.0	-
22.7	60.5	-
31.4	69.5	-
35.9	73.6	-
42.6	78.5	-
49	80.5	-
51.4	81.0	-
53.9	81.5	-
59.2	82.0	-
60.5	82.0	-
60.5	82.2	-
63.8	81.3	-
63.9	81.8	-
66	81.5	-
68	81.0	80.5
68.4	81.0	80.0
69	80.5	-
70.1	81.9	-
72.5	85.3	-
75.0	90.5	80.0
73.5	87.8	80.0
78.4	96.8	-
84.2	104.2	-
89.3	110.5	-
95.2	117.2	-
100	121.8	-

(1+1)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	- 7	50	+ 83
1	- 8 E	55	+ 78 E
5	+32	60	+ 88
10	+50	70	+100
20	+67	80	+108
30	+75	90	+113.5
40	+80	100	+120

Methylaniline (C_7H_9N) + Phenol (C_6H_6O)

Vinogradova and Efremov, 1937

%	d	
	19.5°	45°
100	-	1.0579
93	1.0755	.0570
90	.0764	.0527
80	.0663	.0459
75	.0620	.0424
70	.0584	.0387
68	.0566	.0368
60	.0515	.0318
50	.0443	.0245
40	.0360	.0164
25	.0210	.0033
20	.0160	0.9967
10	.0091	.9900
0	.0025	.9783

%	d				
	25°	40°	50°	75°	100°
100	-	1.0626	1.0632	1.0324	1.0118
90	1.0690	0585	0469	0275	0082
80	0625	0517	0400	0225	0013
75	0582	0463	0384	0193	0.9971
68	0530	0410	0325	0150	9925
60	0476	0358	0278	0090	9870
55	0433	0330	0248	0050	9825
50	0395	0290	0200	0015	9776
46.8	0377	0256	0175	0.9980	9745
40	0321	0203	0125	9933	9696
30	0230	0127	0018	9822	9613
25	0170	0068	0.9998	9804	9602
20	0130	0020	9915	9783	9533
10	0055	0.9941	9860	9680	9478
0	0.9957	9826	9740	9537	9390

%	η				
	25°	40°	50°	75°	100°
100	-	4150	2680	1280	800
90	9020	4250	2980	1340	750
80	10160	4750	3200	1360	750
75	10540	4950	3280	1360	750
68	10760	5070	3330	1430	770
60	10520	5040	3300	1430	780
55	10170	4920	3250	1420	760
50	9740	4730	3140	1410	750
46.8	9400	4540	3050	1390	740
40	8200	4310	2820	1300	720
30	6960	3630	2500	1220	670
25	6060	3250	2340	1140	660
20	5470	2950	2170	1080	620
10	4210	2480	1840	970	610
0	3200	1960	1520	850	520

% σ

19.5° 45°

100	-	37.1
93	37.11	-
90	36.54	35.9
80	35.93	-
75	35.66	34.9
70	35.59	-
68	35.39	34.5
60	35.60	-
50	35.70	34.2
40	35.88	34.2
25	36.35	34.3
20	36.55	-
10	37.20	34.9
0	38.00	35.6

Methylaniline (C_7H_9N) + Thymol ($C_{10}H_{14}O$)

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
60°			
0	1.5509	62.8	1.5163
10	5444	69	5145
19.7	5388	80	5104
28.5	5331	91	5067
38.5	5280	100	5041
50.3	5220		

Methylaniline (C_7H_9N) + Guaiacol ($C_7H_8O_2$)

Pushin and Pinter, 1929

mol %	d	η
	30°	
100	1.1236	4450
90	1088	4000
80	0942	3720
70	0804	3360
60	0692	3030
50	0495	2760
40	0336	2440
30	0187	2220
20	0027	1990
10	0.9866	1720
0	9725	1550

Methylaniline (C_7H_9N) + o-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

%	n_D	%	n_D
40°			
0	1.5609	54.5	1.5481
10	5584	59.5	5469
20	5559	69.5	5443
31.5	5535	80	5418
44.5	5502	83	5400
50	5490	100	5864

Methylaniline (C_7H_9N) + m-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

%	n_D	%	n_D
25°			
0	1.5684	55	1.5523
10	5655	60	5508
20	5626	70	5477
30	5598	80	5450
40	5567	90	5421
45	5552	100	5392
50	5537		

Methylaniline (C_7H_9N) + p-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

%	n_D	%	n_D
40°			
0	1.5609	60	1.5440
10	5579	69	5411
20	5550	79	5383
30	5526	88	5353
39.5	5497	100	5318
50	5468		

Ethylaniline ($C_8H_{11}N$) + Phenol (C_6H_6O)

Tikhomirova and Efremov, 1937

%	f.t.	%	f.t.
100	41.3	55	-22.2
95	37.5	50	-43.5
90	33.4	45	-60.0
80	24.4	25	-81
70	12.6	20	-77.7
65	2.6	10	-71.5
60	-9.2	0	-63.6

%	d	%	d
19.5° 45°			
100	-	1.0597	
90	1.0661	.0461	
83	.0595	.0395	
80	.0569	.0367	
75	.0526	.0318	
70	.0460	.0252	
60	.0347	.0142	
50	.0240	.0031	
43.7	.0172	0.9956	
40	.0110	.9909	
30	.0009	.9798	
25	0.9946	.9734	
20	.9883	.9670	
10	.9755	.9548	
0	.9630	.9437	

%	25°	40°	50°	75°	100°
100	-	1.0626	1.0532	1.0324	1.0118
90	1.0617	0510	0411	0181	0.9951
83	0547	0450	0340	0138	9889
75	0480	0355	0271	0016	9795
70	0415	0295	0210	0.9975	9745
60	0300	0182	0102	9838	9625
50	0187	0075	0.9986	9725	9521
43.7	0121	0.9997	9914	9623	9455
40	0060	9947	9871	9620	9394
30	0.9961	9847	9748	9577	9312
25	9897	9774	9693	9433	9225
20	9833	9718	9621	9360	9137
10	9704	9587	9509	9253	9044
0	9585	9474	9399	9134	8935

%	25°	40°	η 50°	75°	100°
100	-	4150	2680	1280	800
90	8630	4350	3140	1460	830
83	8820	4530	3160	1470	770
75	8530	4340	3060	1410	300
70	8180	4260	3130	1400	300
60	7280	3960	2970	1330	760
50	5980	3410	2540	1220	710
43.7	5100	2990	2150	1120	670
40	4770	2780	2100	1070	670
30	3680	2310	1760	960	590
25	3270	2060	1620	910	580
20	2900	1880	1540	860	540
10	2220	1550	1240	760	520
0	1750	1340	1070	690	480

Bramley, 1916				
%	10°	20°	126°	177°
0.00	0.9647	0.9564	0.8679	0.8225
9.07	9752	9670	8776	8318
17.30	9851	9768	8863	8403
23.94	9932	9849	8939	8472
33.08	1.0041	9959	9040	8568
40.39	0136	1.0053	9127	8647
48.27	0236	0150	9216	8733
55.75	0327	0243	9302	8817
62.82	0413	0330	9387	8895
69.97	0500	0416	9471	8978
78.14	0595	0512	9564	9069
85.39	0678	0595	9648	9152
92.76	0759	0676	9734	9237
100.00	0835	0752	9815	9315

Bramley, 1916				
%	10°	20°	126°	177°
0.00	1654	1387	461	341
9.07	2076	1684	482	352
17.30	2586	2045	508	362
23.94	3145	2415	531	372
33.08	4185	3085	565	386
40.39	5315	3770	594	398
48.27	6960	4700	627	410
55.75	8690	5640	653	422
62.82	10940	6750	680	432
69.97	13470	8010	703	442
78.14	16390	9400	728	453
85.39	18500	10300	745	460
92.76	19640	10870	761	467
100.00	20100	11040	770	490

Vinogradova and Efremov, 1937.				
%	29.8°	40.2°	59.9°	80.0°
0.00	0.9482	0.9400	0.9234	0.9070
7.93	9574	9492	9325	9159
16.61	9677	9593	9425	9258
24.60	9772	9688	9520	9352
32.71	9872	9788	9619	9449
41.46	9981	9895	9724	9553
49.19	1.0076	9990	9818	9645
56.14	0158	1.0073	9899	9726
63.95	0252	0166	9991	9817
70.99	0329	0243	1.0069	9895
78.83	0431	0346	0171	9997
86.08	0516	0431	0256	1.0082
93.19	0594	0509	0335	0162
100.00	0668	0584	0414	0242

Vinogradova and Efremov, 1937.				
%	19.5°	25°	40°	45°
100	-	-	1.0626	1.0579
93.0	1.0652	1.0625	0530	0495
90.0	0621	0592	0499	0463
80.0	0534	0498	0385	0338
75.0	0490	0444	0322	0287
70.0	0427	0365	0250	0218
60.0	0303	0257	0140	0102
50.0	0185	0140	0018	0.9980
43.7	0108	0063	0.9938	9897
40.0	0056	0014	9901	9862
30.0	0.9930	0.9888	9775	9737
25.0	9870	9830	9714	9677
20.0	9806	9760	9650	9615
10.0	9692	9647	9534	9497
0.0	9580	9534	9418	9379

Vinogradova and Efremov, 1937				
%	50°	75°	100°	
100	1.0532	1.0324	1.0118	
93.0	0460	0235	0025	
90.0	0427	0218	0009	
80.0	0300	0093	0.9880	

Bramley, 1916					
%	10°	20°	126°	177°	
75.0	0242	0035	9829		
70.0	0185	0.9975	9760		
60.0	0062	9860	9657		
50.0	0.9942	9730	9525		
43.7	9855	9668	9463		
40.0	9822	9615	9407		
30.0	9700	9483	9285		
25.0	9639	9442	9244		
20.0	9580	9375	9175		
10.0	9459	9266	9072		
0.0	9340	9136	8947		

Bramley, 1916					
%	10°	20°	126°	177°	
0.00	1654	1387	461	341	
9.07	2076	1684	482	352	
17.30	2586	2045	508	362	
23.94	3145	2415	531	372	
33.08	4185	3085	565	386	
40.39	5315	3770	594	398	
48.27	6960	4700	627	410	
55.75	8690	5640	653	422	
62.82	10940	6750	680	432	
69.97	13470	8010	703	442	
78.14	16390	9400	728	453	
85.39	18500	10300	745	460	
92.76	19640	10870	761	467	
100.00	20100	11040	770	490	

Vinogradova and Efremov, 1937					
%	29.8°	40.2°	59.9°	80.0°	
0.00	1173	1021	799	658	
7.93	1351	1159	878	707	
16.61	1629	1354	1001	782	
24.60	1936	1570	1123	852	
32.71	2315	1840	1267	937	
41.46	2830	2185	1428	1025	
49.19	3330	2510	1587	1119	
56.14	3930	2855	1760	1213	
63.95	4705	3340	1960	1312	
70.99	5325	3715	2100	1379	
78.83	6025	4150	2270	1472	
86.08	6480	4400	2380	1523	
93.19	6860	4590	2465	1567	
100.00	7090	4790	2530	1585	

Vinogradova and Efremov, 1937					
%	25°	40°	50°	75°	100°
100	-	4150	2680	1280	800
93.0	7720	3930	2690	1340	700
90.0	7520	3900	2680	1250	700
80.0	6810	3600	2500	1180	660
75.0	6380	3370	2350	1130	640
70.0	5750	3100	2220	1130	600
60.0	4470	2620	1910	990	590
50.0	3500	2230	1650	900	530
43.7	3010	2090	1450	810	520
40.0	2800	1810	1400	820	510
30.0	2180	1530	1180	730	500
25.0	1980	1370	1110	680	460
20.0	1750	1250	1100	640	460
10.0	1400	1030	850	580	410
0.0	1160	910	750	520	380

				Pushin, Matavulj and Rikovski,1949		
%	19.5°		σ	45°		n _D
100	-		37.1			
93.0	37.62		-			
90.0	37.37		36.6			
80.0	36.90		-			
75.0	36.74		-			
70.0	36.64		35.5			
60.0	36.46		-			
50.0	36.30		34.5			
43.7	36.18		-			
40.0	36.09		34.1			
30.0	35.95		-			
25.0	35.85		33.4			
20.0	35.79		-			
10.0	35.67		32.8			
0.0	35.48		32.2			

Pushin, Matavulj and Rikovski,1949			
mol %	n _D	mol %	n _D
45°			
0	1.5452	59.5	1.5424
10	5446	70.7	5417
20	5440	79.7	5413
30	5434	88.5	5405
40	5434	100	5402
50.2	5427		

Dimethylaniline (C ₈ H ₁₁ N) + o-Cresol (C ₇ H ₈ O)			
Pushin and Sladovich,1928			
mol %	f. t.	E	
100	29.5	-	
90	23.8	-	
80	13.5	-27.6	
70	2.5	-17.7	
65	- 4.1	-13.5	
60	-	-10.5	
55	- 8.6	-	
50	- 7.4	-	
45	- 7.7	-	
40	- 8.5	-	
35	-11.2	-16.2	
30	-	-15.6	
25	-13.7	-16	
20	-10.7	-16.2	
10	- 5	-	
0	+ 1.6	-	

Pushin, Matavulj and Rikovski,1949		
gr %	mol %	n _D
40°		
0	0	1.5478
9	11	5464
19	20.5	5452
26.8	30.7	5440
37.3	40.5	5428
47.3	50.2	5418
57	59.2	5408
66.7	68.5	5398
77.8	79.2	5386
88.6	88.8	5377
100	100	5364

Dimethylaniline (C ₈ H ₁₁ N) + m-Cresol (C ₇ H ₈ O)		
Kremann, Meingast and Gugl,1914		
mol %	d	
0	0.9742 (1-0.000 868 t)	
25	0.9925 (1-0.000 846 t)	
50	1.0113 (1-0.000 815 t)	
75	1.0313 (1-0.000 795 t)	
100	1.0493 (1-0.000 711 t)	
mol %	Dv	70°
25	+0.20	-0.27
50	-0.30	+0.17
75	-0.40	-0.14

Kremann, Gugl and Meingast, 1914		
mol%	d.	η
(water= 1)		
9°		
100	1.040	30.0
73.1	1.020	11.16
50	1.002	6.26
34.9	0.990	3.49
0.	0.965	1.28
9°		
100	1.0426	29.30
75	1.0240	13.69
50	1.0040	6.25
64°.		
100	1.0014	4.119
75	0.9786	3.320
50	0.9585	2.295
0.0	0.9201	1.3605
77°		
100	0.992	3.76
73.13	0.966	3.49
25.0	0.936	1.95
0.0	0.909	1.33

Kremann and Schniderschitsch, 1916				Kremann and Meingast, 1919			
%	d			t	d	σ	
	33°	45°					
100	1.024	1.016			100 %		
90.5	1.017	1.009					
81.4	1.010	1.001					
71.6	1.002	0.993					
51.9	0.986	0.978		17.0	1.0367	35.78	
26.5	0.967	0.957		19.0	0.350	35.52	
0	0.946	0.936		30.0	0.268	34.53	
				40.0	0.195	33.24	
				50.0	0.120	32.59	
				60.0	0.045	32.19	
				16.0	1.0373	35.59	
				20.0	0.343	35.45	
				30.5	0.265	34.80	
				45.0	0.159	33.91	
				55.0	0.082	33.46	
				65.0	0.007	33.10	
				70.0	0.9970	32.61	
				80.0	-	-	
				81.0	0.9886	31.78	
					75 mol %		
				14.0	1.0197	37.56	
				20.0	-	-	
				20.6	1.0142	37.16	
				25.4	0.103	36.67	
				44.0	0.9955	35.09	
				57.1	9848	33.91	
				70.0	-	-	
				73.4	0.9714	32.54	
					50 mol %		
				10.0	1.0030	37.76	
				20.0	-	-	
				20.8	0.9941	36.91	
				25.5	9901	36.43	
				41.3	9773	34.90	
				55.1	9660	33.74	
				68.0	9554	32.51	
				70.0	-	-	
				80.4	0.9451	31.42	
					25 mol %		
				10.5	0.9835	37.60	
				20.0	-	-	
				20.8	0.9750	36.84	
				25.5	9706	36.34	
				41.0	9581	34.73	
				56.0	9453	33.31	
				70.0	-	-	
				70.3	0.9233	31.68	
					0 mol %		
				10.0	0.9656	37.57	
				21.4	9561	36.53	
				24.8	9533	36.03	
				35.5	9441	34.93	
				42.0	9388	34.10	
				49.9	9322	33.41	
				60.0	9235	32.32	
				74.2	9117	30.88	

Pushin, Matavulj and Rikovski, 1949

%	mol %	n_D
25°		
0	0	1.5556
10	11	.5536
18	19.8	.5520
23.2	25.5	.5510
35	37.5	.5488
44.2	47	.5474
56.7	59.4	.5455
58.2	61	.5451
71	73.2	.5431
77	79	.5420
86.8	88.2	.5410
100	100	.5392

Kremann, Meingast and Gugl, 1919

mol %	U	Q mix
16°		
0	0.449	-
50	0.451	-2.82

Dimethylaniline ($C_8H_{11}N$) + p-Cresol (C_7H_8O)

Pushin and Sladovic, 1924

mol %	f. t.	E
100	33	-
90	24.6	-
80	11.7	-
70	-10.8	-39.8
60	-19	-36.2
55	-28	-41
50	-	-37.2
45	-31.3	-38.4
40	-24.8	-39.3
35	-20.7	-41.7
30	-16.4	-39.4
20	-10.2	-
10	-5	-
0	+ 1.6	-

Pushin, Matavulj and Rikovski, 1949

%	mol %	n_D
40°		
0	0	1.5478
9	10	.5463
20.3	22	.5444
27.8	30	.5433
37.2	40	.5420
47	50	.5403
52	54.5	.5397
57.2	60	.5388
78	80	.5355
88.7	90	.5334
100	100	.5318

Dimethylaniline ($C_8H_{11}N$) + Cresol (C_7H_8O)

Ampola and Rimatori, 1896-1897

%	f. t.	%	f. t.
0	1.96	8.56	- 2.24
0.41	1.79	10.35	- 3.10
1.34	1.28	13.90	- 5.00
2.20	0.82	17.79	- 7.06
3.29	0.30	23.20	-10.34
4.83	-0.44	26.02	-12.23
6.31	-1.14		

Dimethylaniline ($C_8H_{11}N$) + Thymol ($C_{10}H_{14}O$)

Ampola and Rimatori, 1896-1897

%	f. t.	%	f. t.
0	1.96	7.05	- 1.32
0.51	1.76	9.85	- 2.15
1.62	1.33	12.39	- 3.26
3.05	0.74	13.60	- 3.62
5.03	-0.055	14.03	- 4.02
5.16	-0.14	16.82	- 5.65
6.90	-0.83		

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
60°			
0	1.5374	55.4	1.5161
10	5330	60.2	5149
20.2	5286	70.2	5120
30.3	5247	80	5095
40.3	5211	90.2	5067
45.8	5192	100	5041

Dimethylaniline ($C_8H_{11}N$) + Carvacrol ($C_{10}H_{14}O$)

Ampola and Rimatori, 1896-1897

%	f. t.	%	f. t.
0	1.96	11.68	-2.76
0.46	1.78	14.40	-3.96
1.90	1.20	16.48	-4.92
3.82	0.45	18.13	-5.65
5.59	-1.20	19.71	-6.36
7.75	-1.06	21.60	-7.34
9.74	-1.92		

Dimethylaniline ($C_8H_{11}N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Rikovski, 1937

mol %	f. t.	mol %	f. t.
0	+ 2.5	60	+ 0.5
10	- 1	70	+ 8
20	- 5	80	15
30	-10	90	22.
40	-16.3	100	28
50	- 7.5		

Pushin and Pinter, 1929

mol %	d	n
	30°	
0	1.1236	4450
10	1029	3710
20	0859	3210
30	0673	2840
40	0479	2460
50	0313	2160
60	0143	1890
70	0.9980	1650
80	9795	1460
90	9636	1310
100	9477	1170

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
	30°		
0	1.5530	60	1.5448
10	5515	70	5430
20	5500	79.7	5418
29.5	5487	89.8	5404
40	5473	100	5386
49.7	5457		

Dimethylaniline ($C_8H_{11}N$) + p-Hydroxybenzaldehyde ($C_7H_6O_2$)

Lang, 1912 and Schmidlin and Lang, 1912

%	f. t.	%	f. t.
100	115	29.3	66
83.1	105	29.3	65.5
76	100.5	25.4	61.5
67.8	95.5	16.7	46
58.5	89.4	9.1	30
51.3	84.7	4.6	- 1
46.3	81	2.8	- 3
43.4	78.5	1.5	0
38.6	74.5	0	2
34.2	70.2		

Dimethylaniline ($C_8H_{11}N$) + o-Chlorophenol (C_6H_5OCl)

Bramley, 1916

gr %	mol %	f. t.
0	0	+1.0
3.75	3.53	- 0.35
7.92	7.45	- 2.2
11.61	10.95	- 4.0
15.45	14.60	- 1.0
19.37	18.4	+ 4.0
26.61	25.4	10.0
35.10	33.6	13.75
44.64	42.5	16.2
53.94	52.45	16.6
59.78	58.2	15.7
65.49	64.05	13.9
74.99	73.8	8.1
82.71	81.8	0.4
78.66	77.5	5.3
88.00	87.3	
94.61	94.3	4.5
100	100	8.0
	(1+1)	

%	d	0°	10°	20°
0.00	0.9726	0.9644	0.9562	
14.67	1.0070	9983	9896	
27.71	0432	1.0341	1.0250	
40.65	0820	0725	0630	
52.49	1192	1093	0994	
60.40	1444	1343	1242	
70.50	1763	1659	1555	
75.41	1930	1824	1718	
80.87	2110	2002	1894	
83.81	2207	2098	1989	
90.14	2416	2305	2194	
100.00	2741	2626	2512	

%	30°	40°	d	60°	80°
0.00	0.9484	0.9399	0.9235	0.9069	
14.67	9809	9722	9548	9374	
27.71	1.0159	1.0068	9887	9706	
40.65	0535	0440	1.0251	1.0062	
52.49	0895	0796	0600	0404	
60.40	1141	1040	0840	0640	
70.50	1451	1347	1142	0937	
75.41	1612	1506	1296	1086	
80.87	1786	1678	1465	1252	
83.81	1880	1771	1556	1341	
90.14	2083	1972	1754	1536	
100.00	2399	2284	2060	1834	

η			
%	0°	10°	20°
0.00	2025	1655	1385
14.67	3020	2340	1859
27.71	4350	3135	2430
40.65	6760	4300	3050
52.49	9840	5680	3700
60.40	11900	6720	4140
70.50	14400	7960	4690
75.41	15400	8300	4890
80.87	15830	8440	5000
83.81	15720	8420	4980
90.14	14520	8000	4740
100.00	10790	6390	4210

η				
%	30°	40°	60°	80°
0.00	1170	1024	798	658
14.67	1473	1243	940	731
27.71	1890	1410	1078	804
40.65	2350	1660	1210	878
52.49	2790	1915	1338	949
60.40	3090	2085	1422	995
70.50	3410	2305	1524	1050
75.41	3505	2400	1563	1072
80.87	3545	2470	1589	1090
83.81	3545	2475	1593	1097
90.14	3410	2450	1578	1095
100.00	3080	2320	1513	1070

Pushin, Matavulj and Rikovski, 1949			
mol %	n _D	mol %	n _D
25°			
0	1.5556	60.5	1.5577
10	5558	71	5579
22	5562	79.5	5576
29	5566	90	5573
42	5570	100	5566
49	5573		

Bramley, 1916			
%	U	%	U
0-20°			
0	0.418	58.4	0.466
11.30	429	63.75	467
14.55	432	68.3	463
23.45	439	72.2	458
29.6	442	80.0	451
42.15	455	86.8	441
47.75	461	92.0	427
53.3	467	100	401

 | Q mix
(cal/100 g) | | Q mix
(cal/100 g) | | |----------------------|-----|----------------------|-----| | 40.5 | 490 | 62.6 | 631 | | 45.7 | 531 | 64.85 | 618 | | 49.0 | 558 | 67.25 | 599 | | 51.2 | 570 | 69.85 | 570 | | 54.2 | 593 | 73.65 | 531 | | 57.4 | 616 | 80.0 | 450 | | 60.5 | 631 | | | | Dimethylaniline (C ₈ H ₁₁ N) + p-Chlorphenol
(C ₆ H ₅ OC1) | | | | |---|----------------|-------|----------------| | Pushin, Matavulj and Rikovski, 1949 | | | | | mol % | n _D | mol % | n _D | | 40° | | | | | 0 | 1.5478 | 71.3 | 1.5551 | | 10 | 5485 | 75 | 5556 | | 20 | 5492 | 79.5 | 5563 | | 30.3 | 5501 | 85 | 5572 | | 40.3 | 5510 | 89.8 | 5578 | | 50 | 5520 | 93.8 | 5587 | | 60 | 5534 | 100 | 5593 | | Diethylaniline (C ₁₀ H ₁₅ N) + Phenol (C ₆ H ₆ O) | | | | |---|-------|------|--------| | Tikhomirova and Efremov, 1937 | | | | | % | f. t. | % | f. t. | | 100 | 41.3 | 50 | - 3.3 | | 95 | 38.3 | 38.7 | - 17.5 | | 90 | 35.1 | 35 | - 25.2 | | 85 | 30.6 | 30 | - 33.5 | | 80 | 27.7 | 10 | - 43 | | 70 | 17.2 | 5 | - 40.8 | | 60 | 6.6 | 0 | - 37.7 | | 55 | 1.7 | | | | d | | | | |-------|--------|--------|--------| | 19.5° | 25° | 40° | | | 100 | - | 1.0626 | | | 90 | 1.0703 | 1.0659 | 0494 | | 84 | 0593 | 0537 | 0412 | | 80 | 0550 | 0500 | 0362 | | 75 | 0473 | 0423 | 0294 | | 70 | 0410 | 0360 | 0213 | | 60 | 0260 | 0206 | 0078 | | 50 | 0110 | 0062 | 0.9930 | | 38.7 | 0.9958 | 0.9909 | 9780 | | 30 | 9828 | 9775 | 9650 | | 25 | 9740 | 9687 | 9570 | | 20 | 9687 | 9637 | 9500 | | 10 | 9504 | 9457 | 9342 | | 0 | 9384 | 9341 | 9219 | |

DIETHYLANILINE + P-ETHYLPHENOL

Diethylaniline ($C_{10}H_{15}N$) + Xylenol ($C_8H_{10}O$)				
Lecat, 1949				
%	45°	50°	75°	100°
100	1.0579	1.0532	1.0324	1.0118
90	0450	0407	0167	0.9926
84	0362	0312	0087	9350
80	0314	0275	0037	9300
75	0251	0208	0.9964	9720
70	0195	0137	9887	9662
60	0086	0.9993	9751	9510
50	0.9890	9850	9612	9387
38.7	9737	9694	9410	9223
30	9618	9575	9325	9112
25	9531	9492	9261	9031
20	9463	9425	9187	8963
10	9312	9285	9057	8829
0	9178	9137	8902	8698

%	25°	40°	50°	75°	100°
100	-	4150	2680	1280	800
90	8660	4490	3100	1460	820
84	8760	4490	3130	1440	830
80	8470	4350	3000	1450	800
75	8200	4150	2870	1370	800
70	7750	3950	2770	1330	750
60	6440	3490	2480	1240	750
50	5270	3000	2170	1150	700
38.7	4110	2510	1930	1070	660
30	3270	2130	1650	950	570
25	2860	1950	1520	880	570
20	2630	1800	1370	830	530
10	2170	1480	1220	750	510
0	1770	1350	1070	690	480

%	19.5°	45°
100	-	37.1
90	36.90	36.3
84	36.57	-
80	36.38	35.7
75	36.16	35.3
70	35.88	-
60	35.46	34.4
50	35.26	33.8
38.7	35.07	33.5
30	34.95	-
25	34.90	32.7
20	34.80	32.4
10	34.72	32.1
0	34.57	31.5

Diethylaniline ($C_{10}H_{15}N$) + p-Ethylphenol ($C_8H_{10}O$)			
Lecat, 1949			
%	b. t.		
0	217.05		
60	214.0	Az	
100	218.8		

Diethylaniline ($C_{10}H_{15}N$) + Guaethol ($C_8H_{10}O_2$)			
Lecat, 1949			
%	b. t.		
0	217.05		
57	216.2	Az	
100	216.5		

Isoamylaniline ($C_{11}H_{17}N$) + Eugenol ($C_{10}H_{12}O_2$)			
Lecat, 1949			
%	b. t.		
0	256.0		
-	254.5	Az	
100	254.8		

o-Toluidine (C_7H_9N) + Phenol (C_6H_6O)			
Kremann, 1906			
%	f. t.	%	f. t.
100	41.0	47.2	34.0
92.8	35.0	43.1	34.0
84.2	32.0	33.8	32.0
75.9	17.5	29.6	28.0
67.6	26.5	23.6	23.0
58.9	32.0	16.7	11.0
57.4	33.0	11.7	0.0
53.4	33.5	8.0	-15.0
49.9	34.0	(1+1)	

Biron, Nikitin and Yakobson, 1913			
mol %	d	mol %	d
35°			
100	1.0622	51.027	1.0282
82.942	0507	38.598	0184
79.062	0483	20.084	0032
66.472	0399	0	0.9865

o-Toluidine (C_7H_9N) + m-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	200.35	
61.5	203.265 Az	
74		+5.9
100	202.2	

Kremann, Meingast and Gugl, 1914

mol %	d	
0	1.0151	(1-0.000 808 t)
25	1.0276	(1-0.000 794 t)
50	1.0386	(1-0.000 802 t)
75	1.0452	(1-0.000 782 t)
100	1.0493	(1-0.000 711 t)

Kremann, Gugl and Meingast, 1914

mol %	d	mol %	d
	12°		64°
0.0	1.0053	0.0	0.9625
25.0	1.0179	25.0	0.9755
50.0	1.029	50.0	0.9854
75.0	1.036	75.0	0.9943
100.0	1.0402	100.0	1.0014

Kremann and Meingast, 1914

t	d	t	d
0 mol %			
18.0	1.0002	42.6	0.9801
20.0	-	54.0	9706
21.0	0.9979	65.5	9611
26.0	9937	70.0	-
25 mol %			
16.5	1.0140	68.0	0.9713
20.0	-	70.0	-
25.1	1.0069	80.0	0.9620
38.0	0.9966		
50 mol %			
10.5	1.0300	26.4	1.0167
11.0	0295	54.9	0.9930
20.0	-	68.7	9814
20.8	1.0213	70.0	-
75 mol %			
12.4	1.0356	26.9	1.0240
20.0	-	51.2	0042
22.0	1.0280	70.0	-
100 mol %			
17.0	1.0367	40.0	1.0195
19.0	0350	50.0	0120
30.0	0268	60.0	0045

Tsakalotos, 1908

mol %	d	mol %	d
25°			
0	0.993	66.2	1.023
33	1.012	75.1	1.025
49.6	1.019	100	1.031

Kremann, Meingast and Gugl, 1914

mol %	Dv (%)	
	10°	20° 70°
25	-	-0.42 -0.40
50	-0.615	-0.60 -0.40
75	-	-0.47 -0.30

Kremann, Gugl and Meingast, 1914

mol %	η (water=1)	mol %	η (water=1)
	12°		64°
0.0	4.687	0.0	2.200
25.0	9.94	25.0	3.015
50.0	20.59	50.0	3.862
75.0	27.14	75.0	4.246
100.0	23.92	100.0	4.119

Kremann and Meingast, 1914

t	σ	t	σ
0 mol %			
18.0	37.61	42.6	35.72
20.0	-	54.0	34.90
21.0	37.43	65.5	33.98
26.0	37.07	70.0	-
25 mol %			
16.5	38.40	68.0	34.14
20.0	-	70.0	-
25.1	37.57	80.0	33.27
38.0	36.70		
50 mol %			
10.5	37.98	26.4	36.94
11.0	37.84	54.9	34.69
20.0	-	68.7	33.68
20.8	37.31	70.0	-
75 mol %			
12.4	36.82	26.9	35.78
20.0	36.25	51.2	33.95
22.0	36.09	70.0	32.53
100 mol %			
17.0	35.78	40.0	33.24
19.0	35.52	50.0	32.59
30.0	34.53	60.0	32.19

Tsakalotos, 1908

mol %	η	mol %	η
25°			
0	3645	66.2	13840
33	8060	75.1	13760
49.6	11210	100	12910

Kremann, Meingast and Gugl, 1914

mol %	U	Q mix (cal/g)		
		90°	55°	20°
75	0.506	-0.378	-4.04	-5.31
50	0.490	-0.441	-4.6	-5.49
25	0.485	-2.66	-	-3.54
0	0.492	-	-	-

o-Toluidine (C_7H_9N) + p-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	200.35
57	203.5 Az
100	201.7

o-Toluidine (C_7H_9N) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol %	f. t.	E	min
100	28	-	-
95	24.2	6	-
90	21	9.9	1.21
88	19.8	9.0	1.76
80	-	15.0	4.25
73	18	13.8	2.28
68	21	12.9	-
67	-	14.9	-
60	23.0	-	-
50	24.0	-	-
40	23.0	-	-
30	18.0	-	-
20	9.0	- (1+1)	-

Pushin and Pinter, 1929

mol %	d	η
30°		
100	1.1236	4450
90	1.129	4730
80	1.014	4930
70	0.863	5200
66	-	5220
64	-	5190
60	1.0758	5170
50	0.632	5120
40	0.509	4820
30	0.347	4390
20	0.202	4000
10	0.056	3480
0	0.9910	3100

m-Toluidine (C_7H_9N) + m-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.	Dt mix
0	203.1	
50	-	+6.8
53	205.5 Az	
100	202.2	

m-Toluidine (C_7H_9N) + p-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	203.1
47	204.9 Az
100	201.7

p-Toluidine (C ₇ H ₉ N) + Phenol (C ₆ H ₆ O)			
Philip, 1903			
%	f. t.	%	f. t.
100	40.4	50	29.5
93.7	35.5	46.9	30.0
87.2	29.0	41.5	28.8
82.8	23.5	36.2	27.0
79	18.1	33	24.3
76.4	13.4	29.3	20.6
72.1	9.5	27.3	20.3
68.1	15.3	24.3	23.9
64.6	20.4	17.7	30.5
58.9	25.6	11.2	35.9
54.7	28.0	(1+1) 0	42.8

Kremann, 1906			
%	f. t.	%	f. t.
100	41.0	50.8	29.0
94.8	38.0	45.5	29.0
89.0	32.0	41.8	28.5
81.1	24.0	37.8	27.5
73.1	9.0	32.9	23.0
63.8	22.0	24.5	23.0
58.8	26.0	16.7	32.5
56.5	27.0	11.0	37.0
53.2	28.5	(1+1) 0.0	42.5

Pushin, 1926			
mol %	f. t.	E	min
100	40.8	-	-
90	31.6	8.1	1.0
85	26.7	8.1	1.7
80	20.9	8.1	2.4
75	-	9.1	3.1
70	14.6	9.0	2.0
65	20.2	9.0	1.3
60	24.5	9.0	1.1
55	27.1	8.7	0.4
50	28.6	-	-
45	28.0	20.0	0.3
40	26.9	20.8	1.0
35	22.9	20.7	1.9
32	20.9	20.4	2.3
31	-	20.8	2.3
30	21.2	20.7	1.9
25	26.8	20.7	1.4
20	31.2	20.0	1.0
10	38.5	19.5	0.5
0	43.8	-	(1+1) -

P kg	f. t.
1	9.1
2050	36.0
3050	49.0
3550	55.5

Hrynakowski, Staszowski and Szmytowna, 1936					
%	f. t.	E	%	f. t.	E
100	42.3	-	40	26.0	16.2
90	29.4	-	30	20.3	-
80	13.6	8.4	20	28.6	18.1
70	12.5	8.2	10	39.2	17.2
60	22.8	7.6	0	43.4	-
50	28.3	12.8			
(1+1)					

Atkins, 1910					
(1+1)	f. t. I = 30 II = 28.5				

Kitran, 1924					
mol %	f. t.				
31	20.8	E			
50	29.4	(1+1) I			
75	28.6	(1+1) II			
	9.1	E			

Bramley, 1916					
%	d				
	39.9°	59.9°	79.8°	99.9°	125°
0.00	0.9703	0.9534	0.9365	0.9189	0.8962
9.85	.9808	.9640	.9470	.9295	.9068
20.67	.9913	.9744	.9574	.9398	.9172
29.86	1.0004	.9835	.9665	.9488	.9261
38.57	.0087	.9919	.9750	.9575	.9348
46.25	.0160	.9991	.9820	.9645	.9418
55.09	.0239	1.0069	.9898	.9723	.9495
62.70	.0305	.0135	.9965	.9795	.9567
71.11	.0372	.0201	1.0031	.9856	.9628
80.19	.0441	.0270	.0099	.9924	.9696
89.76	.0512	.0340	.0170	.9995	.9766
100.00	.0585	.0414	.0243	1.0065	.9833

%	η				
	39.9°	59.9°	79.8°	99.9°	125°
0.00	2080	1398	1006	776	608
9.85	2632	1699	1149	869	655
20.67	3352	1983	1323	969	706
29.86	4090	2283	1469	1050	749
38.57	4820	2564	1600	1123	790
46.25	5430	2810	1705	1175	820
55.09	6015	3015	1805	1226	842
62.70	6290	3115	1858	1245	851
71.11	6270	3110	1857	1240	847
80.19	5915	2990	1804	1210	830
89.76	5380	2780	1711	1171	806
100.00	4790	2520	1581	1115	770

Bramley, 1916				
%	d		η	
	150°	175°	150°	175°
0.00	0.8734	0.8502	491	423
16.62	.8898	.8668	541	456
23.11	.8961	.8732	560	468
34.42	.9069	.8842	594	490
38.24	.9105	.8878	603	496
45.61	.9172	.8943	619	507
56.31	.9264	.9034	636	517
65.69	.9341	.9110	641	520
76.25	.9421	.9188	635	515
79.43	.9443	.9210	630	512
86.34	.9491	.9256	618	508
100.00	.9572	.9337	592	492
Thole, Mussell and Dunstan, 1913				
%	d		η	
	30°			
39.9	1.016	7570		
47.5	1.021	8640		
58.8	1.032	9420		
62.2	1.0375	9620		
71.5	1.043	8940		
100.0	1.067	7000		
Beck, 1923				
t	d	η		
		(water 25°=1)		
	0 mol %			
46	0.971	2.076		
60	0.953	1.437		
75	0.943	1.242		
85	0.931	1.076		
95	0.928	0.917		
105	0.914	0.807		
115	0.905	0.675		
120	0.900	0.629		
125	0.890	0.612		
130	0.880	0.595		
135	0.876	0.572		
140	0.873	0.550		
	50 mol %			
46	1.006	4.752		
60	0.989	2.810		
75	0.978	1.979		
85	0.968	1.625		
95	0.963	1.358		
105	0.948	1.123		
115	0.939	0.900		
125	0.926	0.858		
135	0.913	0.749		
	100 mol %			
46	1.058	4.322		
51	1.043	3.651		
60	1.031	2.825		
75	1.016	1.935		
85	1.008	1.579		
95	0.998	1.314		
105	0.983	1.023		
115	0.974	0.876		
125	0.962	0.849		
135	0.950	0.803		
Howell and Jackson, 1934				
%	mol %	ϵ		
		50°		
0	0	11.23	5.68	
10.00	11.23	22.15	6.29	
20.00	22.15	32.79	6.91	
30.00	32.79	43.15	7.57	
40.00	43.15	50.74	8.04	
47.50	50.74	53.23	8.14	
50.00	53.23	55.72	8.31	
52.50	55.72	58.13	8.47	
55.00	58.13	60.65	8.63	
57.52	60.65	63.06	8.73	
60.00	63.06	65.48	8.89	
62.50	65.48	67.89	8.96	
65.00	67.89	70.27	9.01	
67.50	70.27	72.65	9.07	
70.00	72.65	75.01	9.13	
72.50	75.01	77.35	9.20	
75.00	77.35	82.00	9.43	
80.01	82.00	91.11	9.83	
90.00	91.11	100	10.28	
100	100			
Howell and Robinson, 1933				
%	$\kappa \cdot 10^7$	%	$\kappa \cdot 10^7$	
		50°		
0	0.37	62.18	4.67	
11.66	0.56	65.26	5.07	
21.11	0.77	71.37	5.97	
26.21	0.96	75.16	6.31	
29.67	1.05	75.65	6.37	
31.21	1.07	83.32	6.90	
32.39	1.22	83.97	6.95	
33.76	1.32	85.40	6.99	
36.20	1.53	90.09	6.60	
38.17	1.63	92.51	6.12	
49.12	2.71	93.87	5.76	
49.23	2.83	96.34	4.65	
51.73	3.07	98.03	3.44	
52.78	3.17	99.13	2.52	
58.78	4.03	99.43	1.87	
59.90	4.15	100	0.21	
Hrynakowski and Jeske, 1938 (fig)				
%	ϵ	molar polarization		
		at room temp.		
100	9.8	76		
90	9.9	66		
82	10.05	67		
80	10.1	68		
66	10.2	69		
50	8.95	68		
40	8.0	64		
34	7.75	63		
25	7.0	62		
20	5.7	56		
7	4.6	50		
0	3.8	49.5		

p-Toluidine (C_7H_9N) + o-Cresol (C_7H_8O)

Pushin and Sladovic, 1928

mol %	f. t.	E
100	30.3	-
90	23	-
85	19.2	14
80	-	14
75	17.6	13.8
70	21.4	12.9
60	32.8	-
50	38	-
40	34	22.2
30	26.5	24.5
25	-	24.8
20	31	25.6
10	37.3	22.5
0	43.5	(1+1) -

p-Toluidine (C_7H_9N) + m-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	200.55
62	204.3 Az
100	202.2

Pushin and Sladovic, 1928

mol %	m. t.	f. t.	E
100	9.4	10.4	-
90	- 3.9	- 1.0	-
82.5	-16.4	- 9	-20
75	-16.7	- 7.3	-21.7
70	- 2.5	+ 2.5	-
60	+ 7.7	10.6	-
55	10.1	12	-
50	11.8	12.9	-
48	11.5	12.9	-
45	10.7	12.2	-
42.5	-	13.0	9.7
40	-	14.8	9.1
37.5	-	16	8.2
35	-	17.4	8.6
32.5	15.5	18.9	8.5
30	17.5	21.7	5.2
27.5	21.5	24.7	6.9
25	24	26.7	5.8
22.5	26.2	29.3	4.4
20	28.6	31	5
15	33.7	35.1	-
10	37.2	38	-
0	43.5	-	-

(1+1)

p-Toluidine (C_7H_9N) + p-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	200.55
57	204.05 Az
100	201.7

Pushin and Sladovic, 1928

mol %	f. t.	E
100	34.40	-
90	27.3	-
82.5	22.5	-
80	20.6	3.8
77	18.6	-
75	16.3	7.6
70	13.4	11.7
68	-	12.1
64	14	9.1
60	16.4	-
56	18.6	-
50	20.5	-
45	19.1	-
40	17.1	14.8
35	-	16.4
30	20.9	15
20	30.4	15.8
10	37.4	14.1
0	43.5	(1+1) -

p-Toluidine (C_7H_9N) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol %	f. t.	E	min
100	28	-	-
90	21.4	8	1.5
80	15.0	14	3.4
78	-	14	4.4
70	17.0	7	2.6
60	22.2	4.3	-
50	24.3	-	-
40	22.7	20.0	1.5
30	23.0	20.0	4.0
20	31.5	20.0	2.9
10	38.0	16.1	1.3
0	43.5	-	(1+1) -

p-Toluidine (C_7H_9N) + Resorcinol ($C_6H_6O_2$)

Vignon, 1891

mol %	f. t.
0	45
33.33	39
50	69
66.67	80
100	110

Philip and Smith, 1905

%	f. t.	%	f. t.
100	108.7	33.9	16.4
89.9	97.8	33	16.5
70.2	80.9	31.5	16.2
59.4	56.5	28.2	12.45
55.5	30.8	28.5	15.4
53.4	31.6		17.2
50.6	31.95	26.8	15.0
45.3	30.05	25.9	19.2
40.5	26.4	15.4	32.9
36.8	22.15	0	43.3
18.1			
34.6	16.4	(2+1)	

p-Toluidine (C_7H_9N) + Pyrocatechol ($C_6H_6O_2$)

Philip and Smith, 1905

%	f. t.	%	f. t.
100	103.2	44.4	37.8
93.7	99.4		35.8
84.2	92.0	43.9	48.6
77.1	85.2	41.7	47.6
72.8	80.2	40.1	46.9
68.9	75.1	39.9	40.2
60.9	62.65	37.2	44.65
58.8	58.4	35.5	41.4
55.5	52.4	35.1	42.5
	49.8	33.7	41.4
53.3	47.75	26.6	40.5
	36.0	23.8	38.5
52.9	49.9	20.5	36.3
50.9	42.0	16.4	32.6
50	50.2	15.6	33.25
47.7	49.3	9.5	38.0
46.1	36.55	4.2	41.2
	35.8	0	43.4
46	49.4	(1+1)	

p-Toluidine (C_7H_9N) + Hydroquinone ($C_6H_6O_2$)

Philip and Smith, 1905

%	mol %	f. t.
100	100	169.2
84.4	84	159.0
69.8	69.3	147.1
60.6	60	137.5
51	50.3	125.1
49.6	48.9	123.4
44.2	43.6	113.0
40.7	40.0	105.2
37.4	36.9	96.6
34.1	33.5	96.75
27.8	27.2	96.2
21.7	21.2	94.1
10.7	10.4	83.7
1.6	1.5	46.0
1.0	1.0	42.7
0.5	0.5	43.05
0	0	(2+1) 43.4

p-Toluidine (C_6H_7N) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E
100	125.5	-
92.32	126	-
87.75	117	-
80.60	113	-
77.19	110	-
74.27	107.3	-
72.65	106	-
71.93	106	-
68.87	101.4	-
65.33	96	-
58.10	83	-
57.37	83	54.3
52.46	72	"
52.18	70	-
49.23	63.5	54.3
47.92	61	"
46.09	53.8	E
41.52	55.9	-
32.60	55.8	-
26.52	52	-
23.03	48.5	-
18.50	42.1	36
12.48	37.5	"
7.24	40.3	"
4.55	42	-
2.21	43	-
0	44	(2+1) -

p-Toluidine (C_7H_9N) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f. t.	E
100	51	-
90	43	-
83.5	37	25
80	34	22
75	30	25
70	26	26
65	29	25
60	32	25
55	34	22
50	35	35
45	34	21
40	32	22
35	29.5	24
30	26	25
22	31	-
17	35	-
9	40	-
0	45	(1+1) -

p-Toluidine (C_7H_9N) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol %	f. t.	E
100.	108	-
90	100	-
80	88	-
70	71	-
60	49	37
55	38	38
50	47	36
40	56	34
37.5	56.5	-
33.3	57.5	-
30	57	-
25	55	37
20	50	38
15	43	39
12.5	39	39
10	40	39
0	45	(2+1) -

p-Toluidine (C_7H_9N) + o-Chlorphenol (C_6H_5OCl)

Burnham and Madgin, 1936

mol %	f. t.	mol %	f. t.
0	43.5	60	36
10	37	70	27
20	29	80	11
30	32	90	5
40	37.5	100	8
50	38.9	(1+1)	

Burnham and Madgin, 1936

mol %	n_D	mol %	n_D
40°			
0	1.5537	60	1.5580
20	5570	80	5545
40	5590	100	5491
50	5590		

p-Toluidine (C_7H_9N) + p-Chlorphenol (C_6H_5OCl)

Burnham and Madgin, 1936

mol %	f. t.	mol %	f. t.
0	43.5	60	22.5
10	37.5	70	10
20	28.5	71	7
28	21	80	23
30	22.5	90	36
40	24	100	42.9
50	26.2	(1+1)	

mol %	n_D	mol %	n_D
54°			
0	1.5461	60	1.5540
20	5500	80	5540
40	5530	100	5538

p-Toluidine (C_7H_9N) + o-Aminophenol (C_6H_7ON)

Hrynakowski, Staszewski and Szmytowna, 1936

%	f. t.	E
100	174.0	-
90	170.1	-
80	168.3	35.8
70	165.8	36.6
60	158.2	39.2
50	146.9	40.0
40	135.0	40.6
30	126.3	"
20	105.8	40.3
10	76.8	"
7	42.1	"
4	42.6	40.8
2	43.0	41.0
0	43.4	-

p-Toluidine (C_7H_9N) + m-Aminophenol (C_6H_7ON)

Kremann and Hohl, 1920

%	f. t.	E
0	44.0	-
2.7	43.0	-
4.7	40.9	-
9.4	39.0	37.0
12.3	38.0	-
15	40.0	-
18.1	44.0	-
22.4	46.8	37.0
24.2	47.4	"
27.6	49.0	-
31.8	49.5	-
34.6	50.0	-
37.3	60.5	-
41.6	68.0	-
45.6	76.5	-
49.7	81.0	-
53.9	86.5	-
57.7	91.0	-
59.3	92.0	-
63	96.0	-
67.0	98.5	-
69.6	100.5	-
74	103.5	-
79.3	106.5	37.0
83.3	109.0	-
87.7	111.7	-
91.1	113.5	-
94.5	115.0	-
97.1	116.5	-
100	118.0	-

Hrynakowski, Staszewski and Szmytowna, 1936

%	f. t.	E
100	123.4	-
90	115.4	-
80	109.2	-
70	104.8	-
60	95.6	-
50	80.0	44.6
45	75.2	45.3
40	69.2	47.1
35	58.1	48.0
30	50.0	47.3
25	50.0	-
20	48.5	37.8
15	40.0	37.8
10	40.1	37.8
5	42.4	37.0
0	43.4	-
(1+1)		

p-Toluidine (C_7H_9N) + p-Aminophenol (C_6H_7ON)

Kremann and Hohl, 1920

%	f. t.	E
100	43.5	-
98.5	42.5	-
95.5	41.0	-
92.0	54.0	-
87.8	66.0	41.0
82.7	85.0	-
79.0	95.0	-
74.5	110.0	41.0
68.8	120.0	-
60.6	143.0	-
54.5	149.0	41.0

Hrynakowski, Staszewski and Szmytowna, 1936

%	f. t.	E
100	188.2	-
90	181.2	-
80	175.7	-
70	170.8	41.0
60	163.6	-
50	159.2	-
40	150.0	41.2
30	140.2	41.3
20	129.3	41.4
15	120.6	41.5
10	106.0	"
5	70.8	"
3	42.1	41.6
0	43.6	-

p-Toluidine (C_7H_9N) + o-Nitrophenol ($C_6H_5NO_2$)

Pawlewski, 1893 and 1899

mol %	f. t.	mol %	f. t.
0	45.0	53.54	19.5
3.91	42.5	64.09	26.0
7.9	40.5	75.46	32.7
16.08	36.4	87.45	39.0
24.75	32.0	93.57	42.0
33.87	27.3	100	45.0
43.47	23.0		

Philip, 1903

%	f. t.	%	f. t.
100	44.1	51.5	17.8
91.6	38.9	48.8	20.0
84.3	34.4	40.6	24.7
77.4	30.2	33.2	28.9
71.8	26.7	26.9	32.1
65.9	22.8	21.4	34.7
59.5	18.2	12.1	34.5
53.8	16.1	0	43.3

Atkins, 1803			
E : 15.6°			
Thole,Mussell and Dunstan,1913			
%	d	η	
0.0	0.958	5°	1800
35.3	1.050		1835
79.6	1.220		2150
100.0	1.282		2680
p-Toluidine (C ₇ H ₉ N) + m-Nitrophenol (C ₆ H ₅ NO ₂)			
Kremann and Petritschek,1917			
%	f. t.	E	
100	94.8	-	
92.8	88.4	-	
81.3	73.7	-	
74.3	62.5	-	
66.7	42.5	34.9	
64.9	38.0	-	
61.8	36.0	-	
59.1	36.0	-	
55	36.5	-	
53.9	36.5	-	
49.6	35.7	-	
49.2	35.0	-	
44.9	32.2	-	
43.5	32.0	-	
41	29.2	-	
39.6	29.0	23.0	
37.4	26.5	-	
34	-	-	
24.8	30.0	-	
14.1	36.5	-	
5.4	40.5	-	
0	42.5	(1+1)	-

p-Toluidine (C ₇ H ₉ N) + p-Nitrophenol (C ₆ H ₅ NO ₂)			
Kremann and Petritschek,1917			
%	f. t.	E	
100	111.4	-	
93.6	104.5	-	
85.4	93.8	-	
79.4	86.0	57.7	
71.1	68.0	57.7	
66.7	58.0	57.7	
61	32.5	-	
59.7	51.0	-	
55.4	46.0	-	
50.8	39.0	-	
50.5	38.7	24.5	
49.8	38.0	"	
46.2	30.0	-	
44.4	25.0	-	
43	25.0	-	
37.7	24.5	-	
35.8	24.2	-	
31	-	20	
30.5	-	19.8	
23.1	28.0	19.5	
22.8	28.6	-	
15.2	34.5	-	
0	42.5	(1+1)	-

p-Toluidine (C ₇ H ₉ N) + α-Naphtol (C ₁₀ H ₈ O)			
Vignon,1891			
mol %	f. t.	mol %	f. t.
0	45	66.67	61
33.33	46	100	92
50	51		

Philip,1903			
%	f. t.	%	f. t.
100	93.9	38.1	44.6
94.9	89.9	34.5	41.4
83.6	78.2	27.6	34.1-30.3
73	62.5	22.9	30.5
61.8	53.1	15.9	35.4
56.7	53.6	8.1	39.7
51.2	52.6	0	43.1
45.6	50.1	(1+1)	

Beck and Ebbinghaus,1906			
mol %	f. t.	tr. t.	
100	94	48.5	
75	75.2	28.5	
60	50.2	31.5	
50	53.7	10.5	
40	52	9.5	
25	39	12.5	
19	30.3	11.5	
0	45	22	

Beck, 1907

t	d	η_{25} (water = 1)
0 %		
46	0.971	2.076
60	0.953	1.437
75	0.943	1.242
85	0.931	1.076
95	0.928	0.917
105	0.914	0.807
115	0.905	0.695
120	0.900	0.629
125	0.890	0.612
130	0.880	0.595
135	0.876	0.572
140	0.873	0.550
50 %		
95	1.023	2.604
105	1.912	2.073
115	1.000	1.720
120	0.986	1.548
130	0.967	1.276
140	0.958	1.086
100 %		
95	1.092	3.397
105	1.082	2.695
115	1.075	2.280
120	1.071	2.089
130	1.055	1.793
140	1.044	1.509

Hrynakowski, Staszewski and Szmytówna, 1936

%	f. t.	E
100	94.2	-
90	89.2	-
80	80.6	50.9
70	66.2	53.6
60	55.0	52.4
50	55.0	- (1+1)
40	49.3	30.2
30	42.3	32.2
20	33.8	31.3
10	42.2	31.3
0	43.4	-

p-Toluidine (C₇H₉N) + β -Naphthol (C₁₀H₈O)

Vignon, 1891

mol %	f. t.	mol %	f. t.
0	45	66.67	91
33.33	75	100	122
50	82		

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	E
100	122.0	-
93.4	116.5	-
85.8	106.0	-
82.4	102.0	77
76.2	93.5	-
72.3	87.4	-
67.2	80.4	-
63.1	80.5	-
59.5	80.8	-
56.7	81.2	-
51.6	80.4	-
47.3	78.9	-
43.7	77.7	-
36.9	73.7	38.0
32.2	68.2	-
26.4	61.5	-
22.6	56.7	-
18.4	51.2	38.5
14.9	43.7	-
7.7	41.3	-
2.9	44.0	-
0	45.0	- (1+1)

Kremann and Strohschneider, 1918

%	f. t.	E
0	43.5	-
1.9	42.5	-
5.3	41.3	38.0
16.6	48.0	38.2
25.5	62.0	-
35.6	72.0	-
41.0	75.5	-
48.5	79.0	-
56.5	81.5	(1+1)
61.0	81.2	-
61.4	81.3	-
64.5	81.0	-
68.5	80.0	-
73.5	85.0	-
81.7	97.0	-
88.5	105.5	-
94.0	113.8	-
100	122.0	-

Hrynakowski, Staszewski and Szmytówna, 1936

%	f. t.	E
100	122.3	-
90	110.1	80.0
80	111.4	80.6
70	87.9	81.0
65	83.2	-
60	83.3	81.0
55	85.6	81.2
50	82	-
40	78.2	40.0
30	70.0	40.0
20	58.3	39.8
10	40.0	-
5	42.2	40.0
0	43.4	- (1+1)

Dimethyl-o-toluidine ($C_9H_{11}N$) + Phenol
 (C_6H_6O)

Lecat, 1949

%	b. t.
0	185.35
69.5	180.6 Az
100	182.2

 m-xylylidine ($C_8H_{11}N$) + Phenol (C_6H_6O)

Kremann, 1906

%	f. t.	%	f. t.
100	41.0	46.0	16.0
87.8	33.0	42.1	16.0
80.6	25.0	41.9	16.0
70.4	8.0	37.6	14.5
63.8	2.0	33.4	13.0
60.1	7.0	30.0	10.0
55.8	10.5	25.1	5.0
51.9	14.5	17.1	- 6.0
47.4	16.0 (1+1)	0	-16.6

 m-5-Xylylidine ($C_8H_{11}N$) + Phenol (C_6H_6O)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	41	43.7	9.2
90	33.5	40	8.5
80	23	30	3.0
70	5.5	20	-8.0
60	2.5	10	0
50	7.0 (1+1)	0	9.5

 m-5-Xylylidine ($C_8H_{11}N$) + o-Cresol (C_7H_8O)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	30	47.2	48.3
90	23	40	47.0
80	23	30	42
70	38	20	32
60	45	10	10
50	48 (1+1)	0	9.5

 m-5-Xylylidine ($C_8H_{11}N$) + m-Cresol (C_7H_8O)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	8.0	50	4.8
90	2.5	45	4.9
82.5	-3.5	40	3.5
80	0	30	- 7
70	8.5	24	-18
64.1	10.1	20	-10
60	9.7	10	0.5
51	4.7	0	9.5

 m-5-Xylylidine ($C_8H_{11}N$) + p-Cresol (C_7H_8O)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	34.5	50	13
90	22.5	40	0
83	10	35	-10
80	9.5	15	- 9.5
70	19.5	10	- 3
64.5	20.2	0	+ 8.5
60	19		(1+2)

 m-5-Xylylidine ($C_8H_{11}N$) + o-Ethylphenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	-	30	20.5
90	-23	20	10
80	+ 3	15.5	+ 2
70	20	13	- 1.5
60	28	10	+ 1
50	30.0	0	+10.5
40	28		(1+1)

 m-5-Xylylidine ($C_8H_{11}N$) + p-Ethylphenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	44	50	5.5
90	34.5	40	- 3.5
80	21	30	-
75	14	20	- 5.0
70	13	10	+ 4.0
67	14	0	9.5
60	11.5		(2+1)

m-5-Xylidine ($C_8H_{11}N$) + p-Xylenol ($C_8H_{10}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	72.5	40	62.5
90	67	30	57
80	60	20	45
70	57.5	10	22.5
60	63	5	5
50	65.1 (1+1)	0	9

m-5-Xylidine ($C_8H_{11}N$) + 2-Methyl-4-ethylphenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	6	40	24
90	- 1.5	30	16
80	+ 0.5	20	2.5
70	20.5	10	3.5
60	26.5	0	10
52.9	27.4		(1+1)

m-5-Xylidine ($C_8H_{11}N$) + 3-Methyl-4-ethylphenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	23.5	55	23
95	19.5	53	23.5
90	11.5	45	21
85	13	40	17.5
80	18	20	-10
69.2	22.9	15	- 5
65	22	10	- 0.5
60 (2+1)	20	0 (1+1)	+10.5

m-5-Xylidine ($C_8H_{11}N$) + 3-Methyl-6-ethylphenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	42	50	43
90	35	40	40
80	28	30	33.5
75	32	20	20
70	37.5	11.55	3.5
60	42	10	3.8
53	43.1 (1+1)	0	10

m-5-Xylidine ($C_8H_{11}N$) + 4-Methyl-2-ethylphenol
($C_9H_{12}O$)

Morgan and Pettet, 1935

%	f. t.	%	f. t.
100	15	50	32.5
95	8	40	29.5
90	- 1	30	23.5
88	0	20	12
85	12.5	15	3
80	20	10	3
70	29.5	5	7.7
60	32.5	0	10.0
53.5	33.0		(1+1)

o-Phenylenediamine ($C_6H_8N_2$) + Phenol (C_6H_6O)

Kremann and Petritschek, 1917

%	f. t.	E
0	100.0	-
4.2	97.5	-
12.8	91.7	-
21.6	85.0	-
34.3	71.9	-
39.6	66.3	38.7
45.8	55.2	-
47.4	52.5	-
49.3	51.0	40.5
50.0	49.6	41.1
51.7	46.5	41.5
52.4	45.0	42.9
53.7	42.0	-
55.0	43.0	-
57.3	42.0	-
58.1	42.0	-
62	40.1	-
62.6	39.5	-
66.2	37.5	-
67.5	36.2	-
69.6	34.5	-
71.5	33.1	-
72.8	30.5	-
74.2	30.3	-
76.7	28.9	-
79	29.3	-
79.1	29.5	-
81.2	29.0	28.8
85.4	28.0	-
93.5	35.5	-
97.2	38.5	-
100	40.5	-
(1+1)	(2+3)	(1+2) (1+4)

o-Phenylenediamine ($C_6H_8N_2$) + Hydroquinone
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	99.8	-
1.8	98.8	-
4.9	96.5	-
9.7	93.8	-
14.3	95.5	91.8
17.3	98.0	-
22.0	102	-
27.2	104	-
33.1	105 (2+1)	-
38.8	104	-
46.5	112	-
51.0	117	-
56.5	123	-
62.9	131	-
68.2	137	-
87.0	157	-
95.7	165	-
100	169	-

o-Phenylenediamine ($C_6H_8N_2$) + Resorcinol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	100	-
4	97.5	-
10.2	93.5	-
12.7	92	-
20.1	84.5	-
26.0	75	-
27.2	73	-
30.2	65	44.3
32.0	60	-
36.2	47	-
39.8	48	-
40.0	48	-
43.0	49	-
44.8	49.2	-
45.1	49.3	-
49.0	50 (1+1)	-
51.5	50.1	-
52.4	50	-
53.0	50.0	-
53.8	50	-
57.6	49.0	47.0
58.5	49.0	47.0
60.0	47	-
61.6	50.5	-
64.2	58	46.5
64.6	58	-
68.0	69	-
69.0	70	-
73.5	80	-
84.0	96	47.0
88.0	100	-
88.2	100	-
95.0	105	-
100	108.5	-

o-Phenylenediamine ($C_6H_8N_2$) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	99.8	-
6.5	95	-
12.4	92	-
15.5	90	-
21.2	84.5	-
27.2	79.5	-
34.0	78	76
40.0	83	-
44.0	84	-
50.0	84.5 (1+1)	-
51.2	84.5	-
55.5	84	-
60.2	82	-
65.1	80.0	-
68.0	79	-
80.1	87.0	-
85.1	92.5	76
94.3	99.0	-
100	102.7	-

o-Phenylenediamine ($C_6H_8N_2$) + Pyrogallol
($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E
100	126.0	-
93.85	121.7	-
87.42	115.6	-
80.89	108	-
74.66	97.1	88
72.10	-	87.6
69.07	88	-
69.06	88.2	-
66.0	-	88.1
63.0	91.0	87
62.01	92.0	-
59.6	93.0	-
56.8	93.6	-
56.3	93.5	-
56.21	93.4	-
51.3	93.4	-
49.4	92.9	-
47.5	91.7	-
47.4	92	-
46.0	90.8	74
44.4	89.5	-
40.8	86	-
35.2	79.8	-
33.0	77.5	73.2
29.2	-	74
24.6	79.6	74
23.3	81	74
19.8	85.2	74
14.3	91.0	-
12.1	92.7	-
11.6	93	-
9.2	94.3	-
6.7	97	-
3.4	99	-
0	100.9 (1+1)	-

o-Phenylenediamine ($C_6H_8N_2$) + Thymol ($C_{10}H_{14}O$)

Pushin and Dezelic, 1938

mol %	f. t.	E	min.
0	102	-	-
10	97	-	-
20	91.5	-	-
30	85.5	28.5	0.7
40	78.5	29	1.0
50	70	29	1.1
60	55	29.5	1.7
70	38	"	2.1
75	29.5	"	2.4
80	35.5	26	1.2
90	44.5	-	-
100	51	-	-

o-Phenylenediamine ($C_6H_8N_2$) + Salol ($C_{13}H_{10}O_3$)

Pushin and Dezelic, 1938

mol %	f. t.	E	min.
0	102	-	-
10	97	-	-
20	93	-	-
30	89	39	0.5
40	86	40	0.6
50	82	"	0.7
60	78	"	0.8
70	72	"	1.1
80	63	"	1.2
90	48	"	1.3
95	40	"	1.4
100	43	-	-

o-Phenylenediamine ($C_6H_8N_2$) + Guaiacol ($C_7H_8O_2$)

Dezelic, 1932

mol %	f. t.	E	tr. t.
100	29	29	-
90	22.5	21	-
87	21	21	-
80	27.5	18	-
70	30	21	-
66.7	31	-	31
60	40.5	-	31
50	60	-	31
40	72	-	30
30	80	-	30
20	88.5	26	-
10	95	9	-
0	100.5	-	(2+1)

o-Phenylenediamine ($C_6H_8N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol %	f. t.	E
100	108	-
90	100	70
85	95	73
80	88	75
77.5	84	77
75	81	77
73.5	77	77
72.5	80	77
70	82	77
66.7	83	-
62.5	82	64
60	80	65
55	77	68
50	76	-
45	72	72
42.5	73	-
40	74	-
38	75	-
33.3	76	-
30	82	74
27	84	74
25	86	74
20	90	74
10	97	70
0	103	(2+1)

o-Phenylenediamine ($C_6H_8N_2$) + m-Aminophenol
(C_6H_7ON)

Kremann and Hohl, 1920

%	f. t.	E
0	100.5	-
3.5	99.0	-
9.6	97.0	-
10.7	94.5	-
13.8	92.0	-
18.3	89.0	-
21.7	86.0	-
26.8	82.0	-
29.8	78.5	-
35.4	73.0	63.0
40.7	68.0	-
44.4	63.0	-
49.4	67.5	-
53.8	73.5	-
55.6	75.5	-
60.6	83.0	-
64.1	87.0	63.0
67.6	90.0	62.5
72.3	94.0	-
75.4	98.0	-
80	101.5	-
87.3	109.0	-
93.6	113.5	-
100	118.0	-

o-Phenylenediamine ($C_6H_8N_2$) + α -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	99.8	-
5.8	97.0	-
11.2	95.0	-
20.2	88.0	58.2
27.0	82.0	-
34.9	72.3	58.2
42.5	61.0	58.0
50.1	59.0	-
54.5	59.8	-
59.0	60.0 (1+1)	-
62.0	59.8	-
67.7	59.2	-
68.5	59.1	-
74.6	58.0	-
75.0	60.0	-
77.5	66.0	-
81.0	73.0	57.6
89.0	85.0	-
94.0	89.5	57.2
100	92.0	-

o-Phenylenediamine ($C_6H_8N_2$) + β -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	99.8	-
6.8	96.5	-
12.7	93.5	-
22.6	88.0	79.0
29.8	84.0	-
34.9	79.0	-
41.1	82.0	-
46.5	84.0	-
51.5	85.5	-
57.3	86.0 (1+1)	-
63.0	85.0	-
63.1	85.0	-
65.5	84.0	-
67.7	83.5	-
72.2	81.0	-
78.2	92.0	-
86.2	103.5	80.5
93.5	113.0	-
100	122.0	-

o-Phenylenediamine ($C_6H_8N_2$) + 2,3-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
0	103	-
2.9	101	-
5.6	98.5 (3+2)	-
8.3	99	"
14.5	119	"
19.9	130	"
36.1	155 reaction	-
100	162	-

o-Phenylenediamine ($C_6H_8N_2$) + 1,4-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	183	-
92.1	178	-
85.5	165	-
46	113	-
40.9	110	-
32.5	105	-
25.3	100	-
20	94	87
13.5	95	87
8.5	99	-
0	103 (1+1)	-

o-Phenylenediamine ($C_6H_8N_2$) + 1,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	134	-
94	131	-
80.2	111	-
73.4	95	-
65.3	85	-
61.9	94	-
59.7	95	-
57.2	94	-
51.8	90	-
47.3	82	-
43.2	71	62
36.9	72	62
27.9	82	-
21.6	92.5	62
13.1	99	-
5.5	101	-
0	103 (1+1)	-

o-Phenylenediamine ($C_6H_8N_2$) + 1,8-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
0	103	-
4.4	101	-
8.3	98	-
15	95	-
21.4	108	-
25.7	119	-
30.9	130	-
37.5	140	-
42.8	145	-
53.4	149	-
60.3	151.5	-
66.4	149	-
76.9	142	-
87.2	128	101
100	137	- (1+1)

o-Phenylenediamine ($C_6H_8N_2$) + 2,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Herzmelmayer and Riemer, 1922

%	f. t.	E
0	103	-
4.6	101	-
10.6	114	99-98.5
13.7	122	"
16.6	127	"
23.2	135.5	-
27.8	139	99-98.5
33.9	143.5	-
39.4	146	-
42.2	148	-
46.4	150	-
50.5	151	-
50.7	150	-
56.3	149	-
61.9	144	124
72.3	133	"
78.4	152	-
85.5	178	-
93.4	205	-
100	216	(3+2)

o-Phenylenediamine ($C_6H_8N_2$) + 2,7-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
0	103	-
8	97	96
18	107	-
23.2	113	-
27.3	119	-
32.3	126	-
40.5	134	-
48	139	-
50	140	-
60.7	115	101
66.6	125	"
74.5	149	-
84.1	168	-
92.7	178	-
100	186	(3+2)

o-Phenylenediamine ($C_6H_8N_2$) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f. t.	E
0	100.0	-
5.3	97.5	-
14.8	94.2	-
22.5	91.5	-
30.8	87.5	-
37.8	84.3	-
48.1	80.1	-
54.7	75.5	38.2
62	70.5	-
67.5	67.0	-
68.5	66.5	-
74	60.0	-
78.9	55.6	-
85	46.5	38.8
90.3	38.8	-
96	41.8	-
100	-	-

o-phenylenediamine ($C_6H_8N_2$) + m-Nitrophenol ($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f. t.	%	f. t.
100	95.0	53.3	63.1
97.3	92.5	52.8	63.2
94.1	90.0	52.3	73.9
87.7	82.5	49.3	63.4
81.4	73.3	48.6	63.1
77.4	73.7	45.6	67.1
72.3	73.9	43	70.0
66.7	73.7	41.9	71.5
65.2	73.1	41.3	72.5
62.1	71.3	35.2	77.8
60.8	70.7	29.4	83.0
59.8	69.1	21.7	89.0
59.2	69.3	11.8	94.0
56.7	66.2	4.4	98.2
56.1	65.0	0	100.0
(2+1)		(1+1)	(1+2)

o-Phenylenediamine ($C_6H_8N_2$) + p-Nitrophenol ($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f. t.	E
0	100.0	-
5.4	97.8	-
11.7	95.0	-
22.2	89.1	-
29.3	83.0	67.2
39.4	73.5	-
45.8	68.3	-
51.1	73.2	-
52.4	74.4	-
55.8	78.8	-
60.9	83.5	-
68.5	87.8	-
74.5	87.8	-
81.5	86.3	85.5
88	97.5	-
93.8	105.5	-
100	111.5	(1+2)

o-Phenylenediamine ($C_6H_8N_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Zawodsky, 1920

%	f. t.	E
100	110.0	-
95.7	105.0	-
93.4	103.2	-
89.6	99.0	-
84.7	94.2	-
81.0	90.7	-
80.0	89.8	-
78.8	88.8	83.5
76.2	85.8	-
74.9	85.0	83.5
72.8	83.8	-
70.8	84.5	-
67.3	85.0	-
64.7	85.4	-
62.7	85.2	-
62.2	85.6	-
59.3	85.0	-
57.2	84.5	-
55.0	83.5	-
52.9	83.0	-
52.1	82.0	-
48.6	79.0	-
46.2	75.6	-
43.6	72.0	72.0
40.5	75.3	-
37.8	77.5	71.5
33.3	81.3	72.0
28.3	85.1	"
23.5	88.7	"
17.8	92.5	-
10.2	96.0	-
4.2	99.0	-
0	100.2	-
(1+1)		

Buehler and Heap, 1926

(1+1) f. t. = 93.6-94.0°

m-Phenylenediamine ($C_6H_8N_2$) + Phenol (C_6H_6O)

Kremann and Petritschek, 1917

%	f. t.	%	f. t.
100	40.5	50.8	52.0
96.6	36.9	49.6	51.4
90.7	31.5	46.4	50.6
86.1	25.0	41.6	49.3
80	34.3	35.9	46.9
70.7	47.2	29.2	44.6
65.6	50.5	24.5	42.0
65.2	50.7	15.8	48.6
62.0	51.8	11.7	51.8
60.3	52.5	7.1	56.4
56.6	52.5	0	62.0
54.9	52.6		
		(1+1)	(1+2)
		(2+3)	
		E: 41.0°	

m-Phenylenediamine ($C_6H_8N_2$) + Guaiacol ($C_7H_8O_2$)

Dezelic, 1932

mol %	f. t.	E
100	29	29
90	22.5	16.2
80	16.2	16.2
70	25	13
60	26.5	-
50	27	- (1+1)
41	22	22
40	23.5	16.5
30	37.5	19
20	47	22
10	55	19
0	63	-
(1+1)	(1+2)	(2+3)

m-Phenylenediamine ($C_6H_8N_2$) + Resorcinol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	62.0	-
7.9	55	32
14.2	45	33
30.3	57	-
38.7	70	-
45.3	77.0	-
55.0	78	-
61.0	73	-
66.2	65.5	52.2
72.0	-	52.9
73.0	58	52.6
76.0	69.5	53.0
82.0	85.0	-
92.2	100	-
100	108.5	-
(1+1)		

m-Phenylenediamine ($C_6H_8N_2$) + Hydroquinone
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	62.0	-
6.3	60.0	60.0
12.3	85	-
20.2	103	-
25.9	111	-
37.1	121	59.7
48.5	127	-
61.0	125	-
71.4	140	-
72.2	141	-
88.6	160	119.8
95.0	165	-
100	169	- (1+1)

m-Phenylenediamine ($C_6H_8N_2$) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	62.0	-
5.1	56.0	-
12.1	47.0	41
19.1	44.0	-
32.3	54.0	-
38.2	60.0	-
45.6	64.0	-
54.0	64.0	-
63.0	58.2	-
64.0	60	-
70.0	70.0	56
73.0	76	-
81.8	88	56
90.0	97	-
96.2	100.2	-
100	102.7	-

(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol %	f. t.	E
100	108	-
90	99	-
80	80	69
76	71	71
70	77	71
60	83	-
50	85	-
40	82	-
30	71	39
20	46	38
17	40	40
10	53	40
0	63	-

(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + Salol ($C_{13}H_{10}O_3$)

Pushin and Dezelic, 1938

mol %	f. t.	E
0	63	-
15	57.5	-
20	55.5	35
40	48	34
60	41	35
75	36.2	-
80	35	35
85	36.2	-
90	37.5	-
95	40	-
100	43	-

m-Phenylenediamine ($C_6H_8N_2$) + Pyrogallol
($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E
100	126.0	-
94.6	121.8	-
88.9	117.2	-
82.3	111.5	-
77.4	103.5	-
74.4	91.4	-
67.2	75.1	-
64.1	76.0	-
60.3	77.8	75
56.6	79	-
52.4	78.9	-
50.74	77.7	-
50.2	77.5	-
45.5	74.7	-
44.333	74	-
41.1	70.9	-
35.19	63	-
30.94	54	31.0
25.43	-	31.0
21.92	33	30.5
15.67	44.5	31.0
10.62	51	31.0
7.09	55	-
3.95	59	-
0	61	-

(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + α -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f. t.	%	f. t.
0	62	47.4	34.5
3.6	60	54.0	35.0
10.0	55	62.5	34.0
17.4	49	70.1	35.0
20.9	45	78.0	64.5
30.6	32	87.2	81.0
43.0	34	95.0	89.5
		100	92

(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + β -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f. t.	%	f. t.
0	62.0	57.5	110.0
3.8	59.0	62.8	112.5
12.0	72.1	69.0	114.0
19.8	81.5	73.4	114.0
29.5	91.0	78.5	113.0
37.0	96.0	86.9	106.0
42.8	101.0	94.8	113.5
50.0	106.0	100	122.0
(1+2)			

m-Phenylenediamine ($C_6H_8N_2$) + 1,4-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	183	-
88.0	160	-
80.2	140	-
63.7	123	-
52.7	122	-
47.9	120	-
42.4	113.5	-
33.6	106	-
26.6	98	-
14.5	79	-
4.6	61	55
0	63.5	(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + 1,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	134	-
91	119	-
86.7	103	87
75.3	97	"
67.8	116	-
62.7	123	-
58.4	125	-
55.2	123	-
50	118	-
47.4	115	-
41.4	110	-
31.7	97	-
30.2	96	-
22.2	86	49
12	55	49
0	63	(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + 1,8-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	137	-
91.3	127	-
84.2	116	-
75.9	98	-
64.4	92	-
58.2	101	75
54.0	98.5	-
44.6	92	-
44.5	95.5	-
41.5	90	-
35	84	-
31.8	81	-
23.5	73	-
17.4	66	-
9	58	58
4.3	61	58
0	63	(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + 2,3-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	162	-
87.4	150	-
80.5	139	123-122
72.9	135.5	"
66.4	145	-
53.7	149	-
48.9	144	-
46	140	-
42.4	135	-
30.5	120	-
17.2	89	53
4.0	56	"
0	63	(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + 2,7-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	186	-
91.5	179.5	-
85.1	167	-
77.8	148	-
71.9	145	127-126.5
65.1	131	-
59.6	139	-
53.0	135.5	-
47.4	129.5	-
39.6	120	-
30	104	-
22	90	53
11.3	71	"
0	63	(1+1)

m-Phenylenediamine ($C_6H_8N_2$) + 2,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	216	-
88.6	194	-
79.1	168	-
75.5	159	-
69.9	144	125
65.1	147	-
61.7	170	-
56.5	170.5	-
52.2	169	-
49.7	168	-
45.1	165	-
41.5	163	-
35.2	157	61
27.4	146	-
18.4	129	-
6.1	81	61
0	63	-
(1+1)		

m-Phenylenediamine ($C_6H_8N_2$) + m-Aminophenol (C_6H_7ON)

Kremann and Hohl, 1920

%	f. t.	E
100	118.0	-
95.8	115.0	-
92.1	112.2	-
86.2	105.5	-
82.9	101.8	-
75.0	93.0	-
74.5	87.8	-
67.8	82.5	-
63.7	74.0	-
58.4	65.0	23
52	53.0	-
32.6	-	24
28.8	34.0	23
18.4	46.0	-
11.6	52.0	-
4.4	58.5	-
0	62.0	-

m-Phenylenediamine ($C_6H_8N_2$) + o-Nitrophenol (C_6H_5ON)

Kremann and Petritschek, 1917

%	f. t.	E
100	44.3	-
89.8	39.0	-
82.7	36.5	-
77.7	34.9	-
72.6	-	33.5
68.6	33.5	-
65.3	34.5	-
62.9	35.5	33.5
58.4	37.7	-
58	37.9	33.3
53.6	39.5	-
52.4	40.5	33.5
49.9	41.5	-
46.0	42.9	-
42.3	45.2	-
33.9	48.0	-
25.4	51.6	-
17.8	53.6	-
8.3	58.2	-
5.9	59.2	-
0	62.0	-

m-Phenylenediamine ($C_6H_8N_2$) + m-Nitrophenol (C_6H_5ON)

Kremann and Petritschek, 1917

%	f. t.	E
100	95.0	-
94.1	89.6	-
86.1	79.0	-
82	74.4	-
75.2	73.8	-
70	74.4	-
65.2	76.9	-
62.4	77.0	-
61.3	79.3	-
57.2	80.3	-
55	80.2	-
53.1	80.0	-
49.5	79.1	-
49.1	79.2	-
45.1	77.1	-
42.6	74.5	-
35.1	68.0	-
27.1	59.0	52.0
17.9	51.2	-
9.6	56.2	-
5	59.2	-
0	62.1 (1+1)	-

m-Phenylenediamine ($C_6H_8N_2$) + p-Nitrophenol
($C_6H_5O_3N$)

Kremann and Petritschek, 1917

%	f. t.	E
100	111.5	-
93.3	104.8	-
88.4	105.0	-
82.8	114.0	101.8
78.1	118.0	102.0
73.9	119.3	-
71.8	119.9	-
71	119.9	-
67.6	119.0	-
67.2	118.9	-
63.7	117.4	-
63.4	117.0	-
58.4	113.5	-
52.6	108.0	-
43.6	97.0	-
35.5	84.0	-
26.1	64.5	52.4
13.4	55.5	-
3.3	60.3	-
0	62.0	(1+1) -

m-Phenylenediamine ($C_6H_8N_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Zawodsky, 1920

%	f. t.	%	f. t.
0	62.0	50.0	97.0
1.9	61.5	50.1	96.5
7.2	59.0	52.7	99.0
11.4	57.0	55.4	101.0
19.0	54.0	60.0	99.5
21.6	57.0	63.5	100.0
30.0	76.0	70.0	97.5
32.6	79.0	75.0	91.5
37.3	88.0	80.0	95.0
38.4	90.0	84.7	99.0
40.0	89.0	92.4	104.0
42.4	95.5	100	111.0
(1+1)			

Buehler and Heap, 1926

(1+1) f. t. = 107.9-108.2°

p-Phenylenediamine ($C_6H_8N_2$) + Phenol (C_6H_6O)

Kremann and Petritschek, 1917

%	f. t.	E
100	41.0	-
98.5	-	39.9
97.6	43.4	39.3
95.5	53.2	-
94.5	56.5	-
91.2	73	-
86.8	85.2	-
81.3	94.0	-
78.5	98.1	-
76.8	99.8	-
75.2	101.0	-
74.6	101.3	-
74	101.9	-
69.4	103.5	-
66.7	104.6	-
64.3	104.8	-
64.1	104.9	-
62.7	104.7	-
60.3	104.5	-
59.5	104.3	-
57.9	103.9	-
56.8	103.8	-
55	102.6	-
53.5	102.5	-
48.3	98.6	-
41.8	94.6	-
33.7	107.0	-
25	118.1	-
17.2	125.6	-
7.5	132.9	-
3.6	136.5	-
0	139.1	(1+2) -

p-Phenylenediamine ($C_6H_8N_2$) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	138	-
6.2	134	99.0
12.2	129	-
24.5	116	98.8
36.8	101	-
47.5	106.5	-
54.6	107.5	-
60.0	108	-
60.1	108.0	-
66.5	107.3	-
72.7	106	-
75.0	104	-
77.0	103	-
82.5	95.0	-
86.3	90.0	-
90.2	94.5	87.3
92.5	97.0	-
96.5	100.6	87.5
100	102.8	-
(2+3)		

p-Phenylenediamine ($C_6H_8N_2$) + Hydroquinone
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	138.0	-
3.4	136.6	-
7.4	136.0	-
14.2	160.0	134
14.6	158.0	-
18.6	167.0	-
22.4	175.0	-
29.6	183.0	-
35.4	188.0	-
36	188.0	-
42.5	192.0	-
45.2	191.5	-
49.0	193.0	-
50.0	193.0	-
55.0	190.5	-
57.4	187.0	-
58.6	185.5	-
62.0	183.0	-
63.0	180.0	-
65.5	174.5	-
67.4	170.0	-
68.0	167.0	-
69.2	165.0	155
69.7	164.0	-
71.2	160.0	155
73.0	154.8	-
74.0	155.0	-
76.0	155.0	-
79.2	154.0	-
79.5	154.0	-
80.6	153.8	152
82.5	153.0	-
83.0	154.0	152
85.0	156.0	152
87.5	158.3	-
88.5	159.2	-
89.5	160.0	152
92.0	162.1	152
94.0	164.5	-
96.5	166.0	-
97.2	167.0	-
100	169.0 (1+1)	-

Pushin and Rikovski, 1949

mol %	f. t.	E
100	172	-
95	169	-
90	165	-
87	162	162
85	165	162
82.5	171	162
80	175	162
75	183	159
70	188	158
60	195	-
50	198	-
40	197	133
30	190	136
20	178	136
10	152	137
6.5	137	137
5	138	137
0	140 (1+1)	-

p-Phenylenediamine ($C_6H_8N_2$) + Resorcinol
($C_6H_6O_2$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	138.0	-
4.8	135.0	-
10.3	130.5	-
16.3	125.0	-
21.2	119.0	102
27.1	110.0	102
32.2	102.0	-
38.4	108.8	-
43.3	113.5	-
46.8	115.5	-
48.7	115.9	-
48.8	116.0	-
51.2	115.9	-
54.2	115.2	-
56.0	114.5	-
57.5	113.5	-
58.0	113.1	93.5
61.0	112.0	-
64.0	110.5	-
67.8	108.0	-
69.0	107.0	-
70.6	106.0	-
74.0	104.0	-
76.1	102.0	-
81.0	98.0	-
85.0	94.0	93.5
92.5	101.0	93.5
97.0	105.3	-
100	108.5 (1+1)	-

p-Phenylenediamine ($C_6H_8N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol %	f. t.	E
100	108	-
90	90	-
85	75	75
80	108	74
70	123	73
60	130	71
55	132	-
50	133	-
45	131.5	-
40	129	113
35	123	113
30	116	113
27.5	114	114
23	118	113
20	121	113
10	133	112
0	140 (1+1)	-

p-Phenylenediamine ($C_6H_8N_2$) + Guaiacol
($C_7H_8O_2$)

Dezelic, 1932 (fig)

mol %	f. t.	E
100	29	29
90	57.5	29
80	66.5	26
70	69.5	28.5
66.7	70	70
60	82.5	70
50	100	70
40	112	70
30	120	68.5
20	128	68.5
10	135	68.0
0	140	-
	(1+2)	

p-Phenylenediamine ($C_6H_8N_2$) + Pyrogallol
($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E
0	139.8	-
4.7	136.5	-
7.9	134.1	-
15.3	127.0	-
23.1	117.4	98
31.0	101.3	98
36.6	100.5	-
39.0	102	98
39.2	101.9	98
42.1	105	-
46.2	107.1	-
46.6	107.0	-
50.93	108.9	-
52.9	109.9	-
55.59	109.5	-
56.0	109.7	-
59.76	108.9	-
60.78	108.6	-
61.80	107.8	103.9
65.50	105.7	-
67.69	106	-
68.68	106	-
71.73	105.8	-
73.83	104	98
74.26	103	-
80.48	104.2	98
86.15	115	-
91.22	121	98
96.67	124.9	-
100	126.0	-
	(1+1)	(1+2)

Beets, 1937

mol %	f. t.	E
0.0	139.4	-
10.0	136.5	-
26.6	127.0	117.2
35.6	118.7	117.0
41.6	118.4	117.0
46.3	119.2	117.3
50.0	120.0	-
58.0	118.8	-
69.4	108.9	103.4
71.5	106.0	103.2
75.0	106.2	103.2
76.7	108.1	103.3
86.7	120.6	103.5
100.0	132.5	(1+1) -

p-Phenylenediamine ($C_6H_8N_2$) + Salol ($C_{11}H_{10}O_3$)

Pushin and Dezelic, 1938

mol %	E	f. t.
0	-	140
5	-	137.8
10	-	135.5
20	43	130
30	43	125.5
40	43	121
50	43	117
60	43	112
70	43	106
80	43	98
90	43	82
100	43	43

p-Phenylenediamine ($C_6H_8N_2$) + α -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f. t.	E
0	138	-
6.2	136	-
15.8	131	95
32.4	118.2	-
44.5	103	94.8
53.0	100	-
58.5	104.5	-
65.0	108	-
70.0	110	-
74.2	110	-
76.0	109	-
77.7	108.0	-
85.3	100.0	-
92.0	86.0	84.0
98.2	90.5	-
100	92.0	-
	(1+2)	

p-Phenylenediamine ($C_6H_8N_2$) + β -Naphthol
($C_{10}H_8O$)

Kremann and Strohschneider, 1918

%	f.t.	E
0	138	-
7.2	133	117
10.2	131.5	-
22.6	123.5	117
34.0	122.0	-
45.5	137.0	-
47.0	138.0	-
49.0	140.0	-
51.65	146.0	-
55.5	145.0	-
61.0	148.0	-
63.0	149.0	-
64.7	149.0	-
69.6	150.1	-
72.0	150.5	-
76.0	149.0	-
78.0	148.0	-
82.0	145.0	-
83.5	144.0	-
91.0	133.0	-
96.0	115.5	-
100	122.0	-
(1+2)		

p-Phenylenediamine ($C_6H_8N_2$) + 1,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f.t.	E
100	134.0	-
95	131.0	-
87.8	126.0	121
82.8	130.0	121
76	155.0	-
72.7	161.0	-
68.8	167.0	-
65.1	169.0	-
59.5	170.5	-
56.5	169.5	-
52.8	168.0	-
48.3	166.0	-
41.4	162.0	-
34.5	157.0	125
27.4	151.0	125
16.5	140.0	125
0	147.0	-
(1+1)		

p-Phenylenediamine ($C_6H_8N_2$) + 2,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f.t.	E
100	216	-
94.2	209	-
93.9	209	195
92.6	195	195
85.6	204	-
74.7	210	-
68.8	211	-
62.2	212	-
42.8	203	-
34.2	193	-
26.2	183	140
16.2	164	"
11.3	154	"
0	147	-
(1+1)		

p-Phenylenediamine ($C_6H_8N_2$) + 2,7-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f.t.	E
100	186	-
95.7	181	171
89.6	171	"
87.6	174	-
77.9	179.5	-
74.3	179.5	-
64.3	177	-
54.6	171	-
43.3	157	-
31.5	145	127
22.6	134	128
9.6	140	"
0	147	-
(1+2)		

p-Phenylenediamine ($C_6H_8N_2$) + 1,8-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	137	-
91.7	127	109
82.3	115	108
77.1	115	-
74.6	118	-
71.2	117	106
68	113	-
65.8	109	106
53.6	112	-
46.1	117	106
41.6	120	"
35.7	125	"
20	134	-
14.6	138	-
0	147	-

(1+2)

p-Phenylenediamine ($C_6H_8N_2$) + 2,3-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	162	-
95.6	142	-
91.1	148	140-142
84.4	158	"
78	162.5	"
81.2	161.5	142
76	164	"
63.8	160	-
56.5	155	-
46.7	143	-
36.4	132	-
30.2	119.5	-
19.7	131	118
11.4	139	-
5.8	144	-
0	147	-

(1+2)

p-Phenylenediamine ($C_6H_8N_2$) + m-Aminophenol (C_6H_7ON)

Kremann and Hohl, 1920

%	f. t.	E
100	118.0	-
97.5	116.8	-
95.6	115.2	-
92.6	113.2	-
90.6	110.5	-
88.1	107.5	-
84.4	104.5	-
81.1	99.0	-
77.6	94.5	-
74.3	95.0	-
71.3	96.3	-
69.1	97.0	-
65.9	97.0	-
63.3	96.5	-
60.0	97.0	-
57.9	99.0	-
55.2	101.0	94.0
52.1	102.3	-
48.3	102.5	-
46	102.0	-
43.1	102.0	-
39.4	106.0	-
35.4	110.0	102.0
32.7	113.0	-
31.7	114.0	-
29.0	118.0	-
19.8	125.5	-
8.9	133.0	-
3.4	136.0	-
0	138.5	-

(1+1)

(1+2)

p-Phenylenediamine ($C_6H_8N_2$) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f. t.	E
100.0	44.7	-
97.6	43.2	-
95.1	42.5	-
89.3	64.0	-
81.7	82.5	-
75.3	94.0	-
65.2	103.5	40.2
60.1	106.6	-
53.5	111.8	-
45.4	117.5	-
35.5	122.8	40.2
22.8	128.6	-
12.3	133.2	-
5.8	136.2	-
0	139.1	-

p-Phenylenediamine ($C_6H_8N_2$) + p-Nitrophenol
($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f.t.	E
100	111.5	-
98.8	110.5	108.0
97.1	111.5	109.5
94.0	120.5	-
91.4	124.8	109.6
90.7	127.5	108.5
85.6	134.0	-
83.4	134.2	-
78.9	132.8	-
77.3	131.9	-
73.7	128.5	-
71.7	127.0	-
68.1	124.9	-
63.0	121.1	-
62.9	121.3	-
58.1	117.5	-
53.3	117.3	-
53.2	117.5	-
52.1	117.0	-
50.0	116.5	-
46.8	115.0	-
46.6	114.9	-
41.5	111.0	-
32.2	115.1	-
19.7	127.6	-
11.4	133.3	-
5.9	136.0	-
2.2	138.5	(1+4)
0.0	139.1	-

p-Phenylenediamine ($C_6H_8N_2$) + m-Nitrophenol
($C_6H_5O_2N$)

Kremann and Petritschek, 1917

%	f.t.	E
98.8	94.2	-
94.9	105.0	93.2
88.3	125.5	-
82.3	133.5	-
74.3	137.8	-
69.4	137.8	-
65.5	136.6	-
63.8	135.5	-
59.6	133.5	-
58.0	132.0	-
55.6	130.1	-
53.0	127.5	-
51.7	126.5	-
49.6	124.1	-
46.4	121.1	-
45.2	119.0	-
42.2	115.0	-
40.7	112.3	110.9
40.2	112.0	110.0
38.5	111.2	-
37.2	111.2	-
34.6	112.0	110.9
32.5	115.0	110.9
32.1	115.5	-
30.2	118.0	110.9
27.5	120.8	110.9
20.3	127.1	-
13.7	131.5	-
7.7	134.9	-
6.0	136.5	(1+2)
0.0	139.2	(2+1)

p-Phenylenediamine ($C_6H_8N_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Zawodski, 1920

%	f.t.	E
0	138.5	-
6.7	135.7	-
15.0	129.5	-
20.5	124.0	-
26.1	117.2	88.5
30.9	109.2	"
34.9	99.1	"
37.3	88.5	"
44.3	96.5	"
47.5	98.0	"
50.8	-	-
60.6	-	-
67.3	-	-
74.9	109.0	-
78.9	116.0	109.3
79.9	117.0	-
84.2	118.0	-
84.6	118.0	-
89.7	116.0	107.0
90.7	115.0	-
95.3	109.0	-
95.8	109.0	107.0
97.9	108.5	"
100	110.0	(1+2) - (1+3)

2,4-Toluenediamine ($C_7H_{10}N_2$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f.t.	E
100	51	-
90	44	-
80	33	12
75	26	14
72	19	15
60	44	14
50	58	16
40	70	16
30	81	14
20	88	-
10	93.5	-
0	99	-

Benzylamine (C_7H_9N) (b.t.=185.0) + Phenols

Lecat, 1949

2nd Comp		Az		
Name	Formula	b.t.	%	b.t.
Phenol	C_6H_6O	182.2	45	196.8
Cresol o	C_7H_8O	191.1	67	201.45
Cresol m	"	202.2	94	207.2
Cresol p	"	201.7	95	206.5

Benzylamine (C_7H_9N) + Phenol (C_6H_6O)

Pushin and Rikovski, 1937

mol %	f.t.	mol %	f.t.
100	40.5	65	6 E
90	32	60	15
83	15	50	22
80	15	40	18
75	15	30	6
70	13.5	20	-14
(1+1)		(1+3)	

Pushin, Matavulj and Rikovski, 1948

mol %	n_D		
	10°	45°	60°
0	1.5485	1.5314	1.5239
13.5	5542	5370	5294
31.8	5614	5445	5372
41.7	5652	5483	5408
45.0	5665	5494	5418
50.0	5681	5507	5432
52.8	5688	5513	5437
54.8	5692	5516	5439
57.5	5695	5518	5440
59.8	5698	5518	5440
62.2	5700	5517	5439
64.5	5701	5515	5438
67.2	5701	5513	5438
75.5	5690	5499	5422
80.0	5675	5481	5411
89.0	-	5457	5380
100	5558	5402	5332

Benzylamine (C_7H_9N) + o-Cresol (C_7H_8O)

Pushin and Rikovski, 1937

mol %	f.t.	mol %	f.t.
100	30	60	+ 1.5
90	24	50	7.5 (1+1)
80	10	40	3
70	-14	30	-10
69	-15		

Pushin, Matavulj and Rikovski, 1948

mol %	n_D		
	0.8°	40°	60°
0	1.5535	1.5339	1.5239
15.5	5576	5389	5289
30.0	5615	5432	5334
36.5	5631	5450	5354
42.2	5643	5462	5367
44.5	5648	5466	5371
47.0	5652	5470	5375
50.0	5655	5472	5377
52.3	5656	5472	5379
55.0	5656	5472	5379
57.5	5654	5471	5378
60.0	5652	5469	5376
62.5	5649	5465	5373
64.5	5646	5462	5370
70.0	5634	5451	5361
84.5	5596	5412	5321
100	5556	5364	5266

Benzylamine (C_7H_9N) + m-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1948

mol. %	n_D		
	25°		65°
0	1.5414		1.5214
15.7	5455		5258
30.5	5493		5302
40.0	5515		5325
44.8	5525		5334
47.5	5529		5338
50.0	5536		5342
52.5	5538		5344
55.0	5538		5344
57.6	5536		5342
59.6	5535		5340
62.5	5532		5336
64.8	5528		5333
70.0	5517		5320
84.8	5470		5269
100	5392		5218

Pushin and Rikovski, 1937			
mol %	f. t.	mol %	f. t.
100	10	50	36.4
90	0	40	31
81	-20	30	20
70	+14	20	6
60	31	(1+1)	
Benzylamine (C_7H_9N) + p-Cresol (C_7H_8O)			
Pushin and Rikovski, 1937			
mol %	f. t.	mol %	f. t.
100	36	60	5.5
90	26	54	- 8
83.5	18	50	- 6
80	19	40	-11
75	20	30	-30
70	(1+1) 17	20	(1+3) -42
Pushin, Matavulj and Rikovski, 1948			
mol %	n_D		
	1°	40°	60°
0	1.5534	1.5339	1.5239
20.5	5584	5402	5303
40.2	5625	5450	5350
45.2	5632	5458	5356
47.2	5635	5460	5358
49.5	5638	5462	5360
52.5	5641	5463	5360
55.0	5640	5462	5360
59.3	5637	5457	5355
65.0	5630	5450	5348
70.0	5621	5437	5337
72.2	5615	5431	5332
74.5	5611	5426	5325
77.0	5603°	5417	5316
80.0	5593	5407	5305
82.0	5584	5399	5299
84.3	5574	5390	5290
90.0	5544	5367	5269
100	5483	5318	5234
Benzylamine (C_7H_9N) + Thymol ($C_{10}H_{14}O$)			
Pushin, Marich and Rikovski, 1948			
mol %	f. t.	mol %	f. t.
0	51	28	22
10	43	30	19
20	32.5	40	10.5
25	26.5		

Pushin, Matavulj and Rikovski, 1948			
mol %	n_D		
	0.7°	30°	60°
0	1.5535	1.5389	1.5239
16.6	5524	5385	5240
30	5513	5380	5239
39.5	5506	5372	5232
44.3	5501	5388	5229
47.5	5497	5363	5224
49.7	5493	5359	5221
52.3	5486	5353	5213
54.5	5480	5346	5207
59.3	5462	5331	5192
66.2	5435	5305	5171
75.0	5402	5273	5139
80.0	5384	5253	5120
89.5	5348	5215	5082
100	5309	5176	5041
Benzylamine (C_7H_9N) + Guaiacol ($C_7H_8O_2$)			
Pushin and Rikovski, 1937			
mol %	f. t.	mol %	f. t.
100	28	60	26.5
91.5	24	50	15.5 (1+1)
90	25	45	15.5
80	31	40	9
75	32 (1+3)	30	5
70	31	20	- 9
Pushin, Matavulj and Rikovski, 1948			
mol %	n_D		
	12°	30°	60°
0	1.5479	1.5389	1.5239
17.5	5549	5457	5310
30.7	5601	5509	5356
40.7	5640	5539	5382
45.8	5655	5550	5390
47.2	5660	5552	5391
49.7	5666	5555	5392
52.5	5670	5558	5393
54.2	5674	5559	5393
57.7	5680	5559	5392
60.0	5681	5557	5390
64.3	5676	5550	5383
70.4	5662	5533	5368
76.0	5643	5512	5350
80.2	5620	5492	5333
85.0	5588	5469	5314
90.0	5550	5440	5292
100	5474	5386	5239

Benzylamine (C_7H_9N) + o-Chlorphenol (C_6H_5OCl)

Pushin and Rikovski, 1937

mol %	f. t.	mol %	f. t.
100	8	60	46
90	46.5	55	47.5
80	54	50	46
75	55 (1+3)	40	38
70	54	30	21

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	n_D
	20°	60°
0	1.5440	1.5239
15.5	5584	5362
30.0	5720	5482
41.7	5820	5572
45.2	5850	5598
49.8	5879	5620
52.5	5892	5629
54.6	5898	5632
57.3	5902	5634
60.0	5903	5633
62.0	5903	5632
63.6	5901	5630
70.5	5883	5610
80.2	5838	5560
90.0	5738	5478
100	5593	5379

Benzylamine (C_7H_9N) + p-Chlorphenol (C_6H_5OCl)

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	n_D	n_D
	10°	40°	60°
0	1.5489	1.5339	1.5239
15.5	5582	5432	5331
29.5	5666	5515	5416
39.5	5731	5579	5479
44.5	5759	5603	5503
49.6	5783	5625	5525
52.5	5793	5636	5536
54.5	5800	5642	5543
57.5	5808	5650	5549
59.7	5814	5654	5554
62.7	5820	5660	5557
64.5	5822	5662	5559
69.5	5826	5664	5560
74.3	5822	5661	5558
80.0	5814	5652	5552
89.0	5787	5631	5534
100	5727	5593	5504

Pushin and Rikovski, 1937

mol %	f. t.	mol %	f. t.
100	36	60	38.5
95	31	50	16 (1+1)
90	43	45	15.5
80	53	40	13
75	55 (1+3)	30	+ 1
70	52	20	-17

Diphenylamine ($C_{12}H_{11}N$) + Phenol (C_6H_6O)

Philip, 1903

mol %	f. t.	mol %	f. t.
100	40.4		
92.3	36.8	42.7	25.0
84.6	33.3	31	28.3
78.6	30.3	30.7	32.0
72.7	28.1	26.5	34.4
66.7	24.6	22.3	37.1
57.4	19.8	16.8	40.4
	18.1	11.2	44.1
	18.5	5.4	48.2
51.7	18.2	0	52.6

Atkins, 1908

E : 18.1°

Thole, Mussell and Dunstan, 1913

%	d	50°	n
100	1.048	3200	
67.6	1.048	3825	
41.1	1.052	4362	
20.5	1.055	5010	

Bramley, 1916

%	30°	40°	d	61°	81°
0.00	-	-	1.0543	1.0377	
7.87	1.0790	1.0711	0533	0366	
15.18	0780	0700	0523	0356	
23.29	0769	0689	0511	0344	
30.87	0759	0678	0501	0333	
38.60	0749	0668	0490	0321	
46.56	0738	0656	0478	0309	
53.43	0729	0647	0470	0300	
59.65	0721	0639	0461	0292	
68.84	0709	0626	0448	0278	
76.60	0699	0616	0438	0268	
84.59	0688	0605	0427	0256	
92.04	0678	0595	0416	0245	
100.00	0667	0584	0405	0233	

Bramley, 1916

%	30°	40°	η 61°	81°
0.00	13570	8520	4170	2525
7.87	12570	7950	3830	2360
15.18	11650	7430	3590	2240
23.29	10720	6930	3390	2125
30.87	10030	6520	3225	2025
38.60	9470	6200	3085	1955
46.56	8980	5910	2960	1880
53.43	8610	5680	2865	1828
59.65	8280	5510	2790	1782
63.84	7910	5280	2685	1723
76.60	7650	5130	2620	1680
84.59	7420	4980	2565	1640
92.04	7255	4845	2530	1610
100.00	7090	4740	2510	1575

Diphenylamine ($C_{12}H_{11}N$) + o-Cresol (C_7H_8O)

Pushin and Basara, 1927

mol %	f. t.	E	min
100	30	-	-
90	21	-	-
85	18	7.0	1.2
80	14	8.0	1.5
75	-	7.8	2.7
70	12.8	-	-
65	16.8	7.0	1.5
60	19.5	7.0	0.9
50	28.0	7.2	0.6
40	35.2	8.2	-
20	44.0	-	-
10	50.0	-	-
0	53.5	-	-

Diphenylamine ($C_{12}H_{11}N$) + p-Cresol (C_7H_8O)

Pushin and Basara, 1927

mol %	f. t.	E
100	36	-
90	27	10
85	23.5	15.4
80	18.5	-
72	-	17.3
65	22.2	17.3
60	24.1	-
55	27	17.3
50	29	17
40	32	-
30	38	-
20	43	-
10	47.5	-
0	53.5	-

Diphenylamine ($C_{12}H_{11}N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol %	f. t.	E
100	28	-
90	20.6	6
80	-	10
70	-	10
60	18.9	10
50	23.5	9.5
45	25.6	-
40	29.3	-
35	32.5	6.0
30	37.1	-
20	41.0	-
10	49.0	6.0
0	53.6	-

Diphenylamine ($C_{12}H_{11}N$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f. t.	E
100	51	-
90	46	25
75	39	28
60	31.5	28.5
53	28.5	28.5
50	29.5	28
35	37.5	27
20	44	-
10	49	-
0	54	-

Diphenylamine ($C_{12}H_{11}N$) + Vanilline ($C_8H_8O_3$)

Pushin, Rikovski and Milutinovitch, 1949

mol %	f. t.	E
100	81	-
90	74.5	-
80	68	35
70	62	36
60	55	37
50	49	38
40	42.5	38
30	40.5	34
20	45	33
10	49.5	33
0	54	--

Diphenylamine ($C_{12}H_{11}N$) + Resorcinol ($C_6H_6O_2$)

Kremann and Schadinger, 1918

%	f.t.	E
0	52.2	-
3.6	50.5	-
10	68.0	48.9
14	76.0	49.2
20.8	82.0	-
29.8	88.9	-
33.1	91.2	-
38.5	92.0	-
43.1	93.1	49.2
47.4	94.0	-
50.8	95.1	-
52.2	95.1	48.9
56.2	96.1	-
57.1	96.4	48.9
62.4	97.2	-
68	97.8	48.2
73.5	100.0	-
80	101.5	48.2
84.9	103.0	-
88.1	104.1	47.5
100	108.9	-

Vignon, 1891

mol %	f.t.	mol %	f.t.
0	54	66.67	101
33.33	85	100	110
50	93		

Hrynakowski and Adamanis, 1934

mol %	f.t.	E	min
0	54	-	-
6.0	51.0	-	-
7.5	55.5	51.0	4.0
14.6	73.0	"	3.0
21.4	82.5	"	2.8
27.8	86.0	"	2.7
33.9	88.0	"	2.5
39.7	91.0	"	2.5
45.3	93.0	"	2.2
50.6	94.0	"	2.2
55.7	95.0	"	2.0
60.6	96.0	"	1.3
65.3	97.0	"	1.5
69.8	98.5	"	1.3
74.1	99.0	"	"
78.2	100.0	"	"
82.2	102.0	50.5	1.0
86.0	103.0	51.0	0.5
89.7	104.0	50.5	0.5
93.3	106.0	-	-
96.7	107.0	-	-
100	110	-	-

Diphenylamine ($C_{12}H_{11}N$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Schadinger, 1918

%	f.t.	E
0	52.0	-
10.1	126.0	51.0
15.2	136.0	-
19.7	141.0	51.0
24.6	144.5	-
29.0	147.5	-
34.1	150.5	-
38.0	151.5	-
43.9	153.0	-
49.4	154.0	-
49.6	154.5	-
53.1	155.1	50.8
56.0	155.5	-
61.7	156.5	-
70.8	160.0	50.0
75.7	160.5	-
83.9	163.0	-
89.2	164.5	-
98.5	165.5	-
100	168.2	-

Diphenylamine ($C_{12}H_{11}N$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Schadinger, 1919

%	f.t.	E
0	52.3	-
5.3	49.0	-
11.8	56.0	48.2
15.3	61.0	48.2
20.6	67.5	48.2
24.5	71.0	-
30.9	77.0	-
32.5	77.6	48.5
37.2	80.0	-
41.2	83.5	-
43.3	83.5	-
45	88.0	-
50.3	87.5	-
53.8	89.0	-
66.1	94.9	46.1
73.6	93.5	-
84.8	97.8	-
95.8	101.7	-
100	102.8	-

DIPHENYLAMINE + PYROGALLOL

Diphenylamine ($C_{12}H_{11}N$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Schädinger, 1918

%	f.t.	E
0	52.0	-
4.0	74.0	-
11.4	96.5	51.0
17.4	104.5	-
21.9	108.5	-
25.5	110.5	-
31.9	113.8	51.0
34.9	114.2	-
37.0	115.0	-
47.6	117.2	51.0
50.4	118.5	-
53.6	118.8	-
57.0	119.0	50.5
61.4	119.8	-
66.3	120.8	-
71.2	121.5	-
78.1	122.0	50.5
82.5	122.5	-
90.0	123.5	-
100	126.0	-

Diphenylamine ($C_{12}H_{11}N$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Schädinger, 1918

%	f.t.	E
0	52.0	-
7.2	48.2	-
16.6	42.7	-
23.7	38.9	38.5
30.1	44.5	-
49.8	55.0	-
46.8	61.5	38.0
51	65.2	-
52.6	66.0	-
57.6	69.8	-
66.3	75.5	-
73.3	79.5	38.0
80.0	83.0	-
80.7	84.0	-
86.6	86.5	-
100	92.0	-

Vignon, 1891

mol %	f.t.	mol %	f.t.
0	54	66.67	72
33.33	50	100	92
50	61		

Diphenylamine ($C_{12}H_{11}N$) + β -Naphthol ($C_{10}H_8O$)
Vignon, 1891

mol %	f.t.	mol %	f.t.
0	54	66.67	99
33.33	72	100	122
50	87		

Kremann and Schädinger, 1918

%	f.t.	E
0	52.0	-
4.3	49.5	-
7.2	48.3	-
11.7	46.2	43.5
14.9	44.5	-
16.7	44.5	-
22.1	53.1	43.8
26.3	60.5	-
32.0	68.0	-
37.8	75.0	-
48.9	85.2	-
52.6	87.5	42.5
57.9	92.5	-
58.2	87.5	-
65.0	97.8	-
72.8	103.5	-
84.3	110.5	-
91.4	115.8	-
100	121.5	-

Diphenylamine ($C_{12}H_{11}N$) + Trichlorphenol sym.
($C_6H_5OCl_3$)

Giua and Cherchi, 1919

%	f.t.	E
0	53	-
7.29	49.9	-
10.97	43.8	-
12.12	47.7	-
16.45	45.8	-
24.63	42.2	-
29.35	40	32.5
33.06	38.1	32.6
37.52	35.9	32.65
40.59	34.3	32.7
46.37	-	32.7
48.89	33.5	32.4
49.62	34.4	32.6
53.13	35.75	32.3
55.21	37.95	32.15
58.53	39.75	31.9
61.74	42.2	-
64.96	44	-
68.87	46.4	-
71.68	48.7	-
78.21	51.9	-
83.67	54.95	-
88.36	57.7	-
93.69	60.6	-
100	64	-

DIPHENYLAMINE + O-NITROPHENOL

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Diphenylamine ($C_{12}H_{11}N$) + o-Nitrophenol ($C_6H_5O_2N$) Giua and Cherchi, 1919			53.0	74.5	-
			58.3	77.5	-
			65.1	80.0	-
			78.4	85.5	-
			87.2	89.0	44.0
			92.7	91.5	-
			100	94.5	-
Diphenylamine ($C_{12}H_{11}N$) + p-Nitrophenol ($C_6H_5O_2N$) Kremann and Schadinger, 1918					
%	f. t.	E	%	f. t.	E
0	53.1	-	0	52.0	-
12.36	45.8	-	5.9	48.8	-
15.22	43.8	-	8.1	47.8	-
25	37.4	-	11.3	-	47
27.39	35.85	-	14.7	55.0	-
30.58	34.3	-	19.9	61.0	47
34.94	31.7	21.7	22.8	64.5	-
38.21	28.4	21.6	25.1	67.0	-
40.04	27.1	21.6	29.2	70.0	-
42.48	25.9	21.65	34.0	74.0	-
47.22	23.2	21.65	37.9	77.0	-
48.28	21.7	21.5	42.2	80.5	-
51.10	21.65	-	47.2	84.0	-
53.31	21.6	21.55	52.1	86.5	-
58.28	24.9	21.6	53.7	87.5	-
62.64	27.3	-	60.8	91.5	-
68.86	31.1	-	67.0	95.3	47
71.95	32.7	-	78.9	100.5	-
75.95	34.45	-	85.8	104.0	-
79.45	36.2	-	93.4	108.0	-
83.04	38	-	100	111.5	-
88.08	40.15	-			
95.575	43.3	-			
100	45	-			
Kremann and Schadinger, 1918					
%	f. t.	E			
100	43.5	-	Diphenylamine ($C_{12}H_{11}N$) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)		
95	42.0	-	Kremann and Schadinger, 1918		
87.7	38.8	-			
80.5	35.5	-			
75.9	32.5	-	%	f. t.	E
67.5	28.5	-	0	52	-
62.4	25.5	-	4.9	50.5	-
53.1	20.5	20.5	8.9	49	-
47.9	22	20.5	15.6	46.5	41.6
46.4	23.0	20.5	18.5	45.2	-
42.3	25.5	-	24.2	42.9	-
33	31.5	-	29.7	44.5	-
25.3	36.5	-	33.6	50	41.5
14.6	43.5	20.0	39.5	58.2	-
8.6	47.3	-	45.0	64	-
0	52.0	-	54.6	74.2	-
			61.2	80.5	-
Diphenylamine ($C_{12}H_{11}N$) + m-Nitrophenol ($C_6H_5O_2N$)			67.6	85.3	-
Kremann and Schadinger, 1918			71.7	88.5	-
			75.8	92.8	-
%	f. t.	E	79.7	95.5	-
0	52.9	-	84.1	98.9	41.5
6.0	49.3	-	91.0	103	-
13.1	46.2	44.0	96.4	106.5	-
19.4	45.0	-	100	108	-
26.5	53.5	-			
31.6	59.0	-			
36.6	64.1	-			
40.4	66.5	-			
46.9	71.2	43.8			
49.4	72.5	-			

Diphenylamine ($C_{12}H_{11}N$) + Picric Acid
($C_6H_3O_7N_3$)

Kremann and Schädinger, 1918

%	f. t.	tr. t	min	E	min
100	120.5	-	-	-	-
95.3	114.3	-	-	-	-
88.4	106.5	-	-	-	-
84.8	102	-	-	-	-
84.1	102	-	-	-	-
79.6	95	67	-	-	-
77.8	94	-	-	41	-
75.0	90	66	-	41.2	4
73.6	89	-	-	41	-
73.1	88.5	-	-	-	-
68.7	82.5	-	-	41	-
67.4	81.5	-	-	-	-
65.0	78.5	66	2	40.2	4
62.7	75	67	-	-	-
62.2	75.1	-	-	-	-
59.7	72	66.5	-	-	-
58.3	71	-	-	-	-
57.7	69	66	2	41.0	2
57.6	68.9	-	-	41.0	-
54.4	67	-	-	-	-
52.8	66.6	-	-	-	-
50.7	66.2	-	-	-	-
50.0	66	-	-	42.6	4.5
49.0	65.8	-	-	-	-
44.8	62.8	-	-	-	-
44.6	62.5	-	-	-	-
44.3	62.5	-	-	43	6.5
35.0	56	-	-	42.9	10
34.4	55.1	-	-	43	-
27.5	46.8	-	-	43	-
25.0	44	-	-	43	14
23.1	43.5	-	-	42.8	-
21.2	43.9	-	-	-	-
19.3	45	-	-	42.8	-
13.8	47.2	-	-	43	-
13.3	47.5	-	-	-	-
7.1	49.5	-	-	-	-
6.4	50	-	-	-	-
0	52	-	-	-	-

(1+1)

Giua and Cherchi, 1919

%	f. t.	E
0	53.1	-
5.56	51.15	-
14.20	48.1	-
17.61	47.0	-
21.46	45.5	-
25.20	44.1	43.9
28.99	-	44.2
32.69	-	44.2
36.90	49.6	44.3
40.83	54.5	44.3
44.35	58.8	44.2
47.47	62.5	-
49.63	64.5	44.1
50.10	63.9	-
54.40	66.4	-
58.19	67.05	65.4 tr. t.
61.40	-	65.3 "
64.21	79.3	62.6 "
69.00	85.3	63 "
71.52	87.15	-
75.05	92.8	-
79.76	98.45	-
83.75	103.3	-
100	119.5	-

(1+1)

Diphenylmethanamine ($C_{13}H_{11}N$) + Phenol (C_6H_6O)

Bramley, 1916

%	mol %	f. t.
0	0	- 9.6
7.45	13.54	-13.4
15.48	26.27	-16.5
20.75	33.75	- 9.6
27.10	42.00	- 2.0
30.5	49.5	+ 4.0
41.5	58.0	10.6
48.8	65.0	16.0
57.5	72.5	21.6
73.4	84.3	30.3
91.0	95.3	38.0
100	100	41.0

E : 25 mol % -18.1

%	9.8° ^d	20.1°	9.8° ⁿ	20.1°
0.00	1.0595	1.0515	10960	7220
4.92	0605	0523	10900	7080
9.48	0615	0532	10970	7150
17.18	0632	0548	11450	7300
27.69	0657	0572	12260	7640
36.92	0679	0593	13060	7980
48.42	0708	0621	14110	8450
56.87	0728	0641	15020	8850
67.10	0753	0665	16140	9350
78.79	0782	0693	17520	9950
89.30	0809	0720	18770	10480
100.00	0836	0750	20100	11040

%	30°	40° ^d	60°	30°
0.00	1.0438	1.0359	1.0198	1.0040
4.98	0449	0369	0207	0048
10.21	0461	0379	0217	0058
20.04	0483	0401	0237	0076
35.35	0519	0435	0269	0104
49.87	0552	0467	0301	0136
62.12	0581	0495	0328	0164
73.58	0607	0521	0354	0188
82.22	0627	0542	0373	0206
90.05	0645	0560	0391	0223
100.00	0668	0584	0414	0242

%	30°	40° ⁿ	60°	80°
0.00	5130	3835	2480	1735
4.98	5100	3785	2435	1708
10.21	5130	3760	2400	1682
20.04	5190	3770	2370	1650
35.35	5420	3880	2375	1624
49.87	5700	4020	2395	1603
62.12	5970	4150	2415	1594
73.58	6260	4280	2445	1589
82.22	6500	4400	2470	1585
90.05	6730	4510	2495	1586
100.00	7090	4740	2530	1585

Diphenylmethylaniline (C ₁₅ H ₁₃ N) + o-Chlorophenol (C ₆ H ₅ OC1)					
Bramley, 1916					
%	mol %	f. t.			
0	0	- 9.6			
7.27	10.04	-13.6			
14.10	18.94	-17.6			
21.30	27.83	-21.6			
27.55	35.14	-25.1			
34.00	42.33	-28.5			
39.90	48.60	-24.2			
45.40	54.20	-18.7			
51.75	60.43	-13.0			
58.85	67.08	- 8.8			
71.70	78.29	- 2.15			
86.05	89.78	+ 3.4			
100	100	+ 8.0			
%	d	0°	10°	20°	
0.00	1.0675	1.0596	1.0518		
13.83	0924	0842	0760		
25.90	1147	1064	0975		
38.35	1392	1302	1212		
50.52	1639	1545	1451		
57.58	1790	1692	1594		
68.76	2032	1930	1828		
79.34	2263	2157	2051		
89.62	2494	2384	2274		
100.00	2741	2626	2512		
%	d	30°	40°	60°	80°
0.00	1.0439	1.0360	1.0202	1.0044	
13.83	0678	0596	0432	0268	
25.90	0889	0803	0632	0461	
38.35	1122	1032	0853	0674	
50.52	1357	1263	1077	0891	
57.58	1496	1398	1204	1010	
68.76	1726	1624	1422	1220	
79.34	1945	1839	1630	1421	
89.62	2164	2054	1837	1620	
100.00	2399	2284	2060	1834	
%	η	0°	10°	20°	
0.00	18350	10950	7250		
13.83	16180	9850	6470		
25.90	14590	9080	5950		
38.35	13320	8450	5530		
50.52	12500	7950	5200		
57.58	12160	7670	5020		
68.76	11690	7300	4790		
79.34	11320	6990	4590		
89.62	11030	6680	4400		
100.00	10790	6390	4210		

%	30°	40°	η	60°	80°
0.00	5130	3940	2480	1735	
13.83	4635	3500	2275	1591	
25.90	4305	3250	2110	1500	
38.35	4030	3040	1965	1420	
50.52	3805	2850	1850	1347	
57.58	3685	2750	1795	1300	
68.76	3510	2600	1710	1238	
79.34	3360	2490	1638	1180	
89.62	3215	2390	1575	1120	
100.00	3080	2320	1513	1070	
Q mix (54 %) = 0.89 cal/g					
Dixylylamine s. (C ₁₆ H ₁₉ N) + o-cresol (C ₇ H ₈ O)					
Morgan and Pettet, 1935					
%	f. t.	%	f. t.		
100	30	39	8		
90	28	32.4	16.1		
80	24.5	30	16		
70	21	26.5	18		
60	17	20	28		
50	10.5	10	40		
40	6	0	50		
Dixylylamine s. (C ₁₆ H ₁₉ N) + m-cresol (C ₇ H ₈ O)					
Morgan and Pettet, 1935					
%	f. t.	%	f. t.		
100	8	30	23		
90	6	21.5	30		
80	1.5	20	31		
70	- 7	19.4	31.5		
60	-21	13	36		
50	- 5.5	10	40		
40	10	0	50		
Dixylylamine s. (C ₁₆ H ₁₉ N) + p-cresol (C ₇ H ₈ O)					
Morgan and Pettet, 1935					
%	f. t.	%	f. t.		
100	34.5	33	21.7		
90	31	30	23		
80	28	25	28		
70	22	20	32.3		
60	15	15	33.5		
50	8	10	40		
40	18	0	50		

Benzidine ($C_{12}H_{12}N_2$) + o-cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	128.0	-
10	116.4	-
20	103.5	86.6
30	90.0	86.4
40	90.7	86.1
50	93.0	-
60	93.0	-
70	90.0	30.0
80	83.8	30.5
90	59.8	30.5
100	30.0	-
(1+2)		

Benzidine ($C_{12}H_{12}N_2$) + m-cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	128.0	-
10	117.8	-
20	106.0	84.0
30	92.0	"
40	87.0	"
50	90.0	-
60	89.0	-
70	86.5	-
80	80.5	-
90	68.2	-
100	40	-
(1+2)		

Benzidine ($C_{12}H_{12}N_2$) + p-cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	128.0	-
10	116.2	110.8
15	113.8	111.8
20	120.5	111.0
30	130.5	111.8
40	136.2	-
50	137.5	-
60	138.2	-
70	135.5	-
80	131.0	-
90	110.5	-
100	37.0	-
(1+2)		

Benzidine ($C_{12}H_{12}N_2$) + Dioxydiphenyl
($C_{12}H_{10}O_2$)

Grimm, Gunther and Tittus, 1931

mol %	f. t.	E
0	129	127
10	233	127
20	256	128
30	264	180
34	265	262 (2+1)
40	261	246
47.5	246	246
50	258	246
60	265	257 (2+3)
70	260	249
76.5	250	249
80	256	249
90	267	249
95	270	249
100	273	270

Benzidine ($C_{12}H_{12}N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetski and Rikovski, 1948

mol %	f. t.	m. t.
100	108	-
90	96	96
80	113	94
70	131	-
60	141	-
55	144	-
50	145	-
45	144	-
40	141	112
30	134	116
20	118	118
10	123	114
0	128	- (1+1)

Benzidine ($C_{12}H_{12}N_2$) + Pyrogallol ($C_6H_6O_3$)

Tronov and Bortovoi, 1954 (fig)

mol %	f. t.
0	129
20	107 E
30	128
40	137 (3+2)
48	135 E
50	140 (1+1)
60	133
65	128
68	129
77	95 E
80	99
100	133

Benzidine ($C_{12}H_{12}N_2$) + Trichlorophenol-s
($C_6H_3OCl_3$)

Tronov and Bortovoi, 1954 (fig)

mol %	f. t.	mol %	f. t.
0	129	80	100 (1+4)
20	108	90	94
40	93	99	66 E
50	90	100	67
60	93		

Benzidine ($C_{12}H_{12}N_2$) + 2,4-dinitrophenol
($C_6H_4O_5N_2$)

Buehler and Heap, 1926

(1+1) f. t. = 143.5-143.8

p-Aminoazobenzene ($C_{12}H_{11}N_3$) + p-Oxyazobenzene
($C_{12}H_{11}ON_2$)

Grimm, Gunther and Tittus, 1931 (fig.)

mol %	f. t.	E
0	151	-
10	144	-
20	137.5	96
30	129	96
40	120.5	96
50	110	95.5
60	98.5	95.5
63.5	95	95
70	102	94.5
80	110	95
90	117	-
100	122.5	-

o-Bromaniline (C_6H_6NBr) + Picric acid
($C_6H_3O_7N_3$)

Hertel, 1924 (fig.)

%	f. t.	%	f. t.
100	122	50	126
83	102 E	34	113
67	125	16	84
59	128.5 (1+1)	0	36

(1+1) : tr. t. = 95°

2,4-Dichloraniline ($C_6H_5NCl_2$) + Picric acid
($C_6H_3O_7N_3$)

Hertel, 1924 (fig.)

%	f. t.	%	f. t.
100	123	50	104
84	100 E	34	96
67	105	16	86
56	106 (1+1)	0	64

2,4-Dibromaniline ($C_6H_5NBr_2$) + Picric acid
($C_6H_3O_7N_3$)

Hertel, 1924 (fig.)

%	f. t.	%	f. t.
100	124	34	122
84	108 E	16	109
67	122	4	76 E
44	124 (1+1)	0	78

Pentachloraniline ($C_6H_2NCl_5$) + Pentachlorophenol
(C_6HOC1_5)

Brandstätter, 1948

%	f. t.	%	f. t.
100	190	40	217
80	200	20	225
60	209	0	232
50	213		

 α -Naphthylamine ($C_{10}H_9N$) + Phenol (C_6H_6O)

Philip, 1903

%	f. t.	E	%	f. t.	E
100	40.4	-	32.3	27.6	-
88.8	34.2	-	29.6	15.9	-
74.1	21.6	-	26.6	25.5	24.0
69.9	17.7-16.1	-	25.5	21.3	-
66.5	16.8-15.9	-	22	25.6	24.2
61.3	20.8	5.5	17.1	31.0	-
55	24.8	-	11.7	36.9	-
46.9	27.8	-	6.2	42.5	-
41.7	28.6	-	0	48.3	-

(1+1)

Beck, 1907							
t	0%	d	100%				
		50%					
51	1.098	1.075	1.043	55	32.1	-	-
60	1.078	1.060	1.031	50	33.3	-	-
75	1.071	1.055	1.016	45	32.0	-	-
85	1.065	1.040	1.008	40	31.3	-	-
95	1.059	1.029	0.998	35	29.0	27.5	1.4
105	1.048	1.015	0.983	30	-	27.3	2.3
115	1.033	1.003	0.974	28	-	27.5	1.9
125	1.022	0.992	0.962	25	30.2	26.5	0.9
135	1.012	0.981	0.950	20	34.3	-	-
				15	38.4	-	-
				10	42	-	-
				0	49	-	(1+1)
				α -Naphthylamine ($C_{10}H_9N$) + m-Cresol (C_7H_8O)			
				Pushin and Basara, 1927			
t	0%	η (water =1)	100%	mol %	f. t.	E	
		50%					
51	11.396	9.682	3.651	100	5	-	-
60	8.137	6.376	2.825	90	-11.4	-	-
75	5.115	4.009	1.935	75	-5.4	-	-
85	3.947	3.084	1.579	70	0	-	-
95	3.144	2.435	1.314	65	+4.6	-	-
105	2.565	1.976	1.023	60	9.8	-	-
115	2.153	1.619	0.876	55	15.4	-	-
125	1.724	1.373	0.849	50	17.0	-	-
135	1.453	1.207	0.803	48	16.2	-	-
				45	-	14.0	-
				44	-	14.7	-
				43	-	14.5	-
				37	17.8	10.1	-
				30	24.6	9.3	-
				25	28.4	-	-
				20	33.2	-	-
				15	37.6	-	-
				10	41.3	-	-
				0	49	-	(1+1)
				α -Naphthylamine ($C_{10}H_9N$) + p-Cresol (C_7H_8O)			
				Pushin and Basara, 1927			
%	30°	d	50°	30°	η	50°	
100	1.067	1.048	7000	3200			
48	1.094	1.075	24900	8520			
43.5	1.097	1.076	26900	9000			
20.9	1.106	1.092	32400	10900			
7.5	-	1.102	-	11300			
0	-	1.108	-	11200			
Hrynakowski and Jeske, 1938							
%	ϵ	%	ϵ	mol %	f. t.	E	min
100	9.8	56	8.5	100	36	-	-
90	10.7	50	7.95	90	26	-	-
83	10.2	32	7	83	23	5.0	-
78	9.7	20	6.1	82	20	14.0	1.3
72	8.3	10	4.8	78	16.8	14	1.6
67	8.95	0	4.0	76	-	14	3.6
				73	-	14	2.2
				70	20.5	13.8	1.6
				65	23.4	6.7	1.3
				60	26.0	4.0	-
				56	28.3	-	-
				50	28.8	-	-
				44	28.2	-	-
				40	27.7	-	-
				35	-	24.8	3.4
				33	-	24.5	3.9
				30	24.0	25.1	3.6
				25	29.1	22.0	2.0
				20	33.0	22.3	2.1
				10	41	20.1	0.9
				0	49	-	(1+1)
α -Naphthylamine ($C_{10}H_9N$) + o-Cresol (C_7H_8O)							
Pushin and Basara, 1927							
mol %	f. t.	E	min				
100	30	-	-				
95	25	-	-				
90	21.5	14.0	0.3				
85	17.8	13.3	1.7				
82	-	15.3	3.7				
80	-	15.1	-				
78	16.5	15.0	-				
74	21.5	11.8	1.2				
70	24.3	11.3	0.7				
60	30.1	-	-				

α -Naphthylamine ($C_{10}H_9N$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f. t.	E
100	51	-
90	44	-
80	36	-
70	27	-
65	24	11
59	18	-
48	11	11
40	-	11
32	25	-
20	35	-
10	42	-
0	51	-

 α -Naphthylamine ($C_{10}H_9N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Rikovski, 1937

mol %	f. t.	mol %	f. t.
0	49	60	20
10	42	70	16
20	35	80	16
30	27	90	21.5
40	20	100	28
45	25.5		

(1+1)

Pushin and Mazarovich, 1914

mol %	f. t.	E	min
0	48.5	-	-
10	41.8	-	-
20	34.0	15.4	30
25	30.7	14.8	-
30	24.8	18.3	70
35	21.2	19.8	-
40	-	19.8	140
43	20.5	19.7	-
45	21.1	-	-
47	21.0	-	-
50	21.4	-	-
55	21.1	-	-
60	19.8	-	-
64	17.9	5.0	-
65	17.9	10.7	32
67	17.1	-	-
70	15.2	12.5	-
71	15.3	13.5	90
75	-	13.9	110
77	-	14.1	160
79	13.5	13.9	130
80	14.0	14.3	120
83	13.3	14.1	-
85	18.0	14.0	100
87	18.6	9.9	-
90	21.4	4.3	10
91	22.2	-	-
100	28.13	-	-

 α -Naphthylamine ($C_{10}H_9N$) + Hydroquinone ($C_6H_6O_2$)

Philip and Smith, 1905

%	f. t.	%	f. t.
100	169.2	11.1	45.05 E
75.1	157.2	10.1	56.8
60.8	148.7	8.8	54.9
43.5	134.8	6.5	50.2
34.4	125.0	5.1	46.4
27	114.5	"	45.35
19.4	98.5	3.1	45.7
14.2	76.9	"	45.2
12	65.8	1.2	47.0
11.1	61.0	0	48.0
"	57.5 unst		

 α -Naphthylamine ($C_{10}H_9N$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1918

%	f. t.	E
0	48.5	-
2.8	45.8	-
6.3	41.5	-
6.9	41.8	-
9.6	39.1	-
10.9	36.9	32
12.5	-	31.8
13.1	-	32.7
18.3	-	32.0
18.4	34.0	32.2
19.6	35.0	32
24.4	37.7	-
24.5	-	31.8
24.8	37.5	-
29.5	40.0	-
30.3	40.5	-
32.0	40.9-41.2	-
32.4	41.5	-
35.0	41.9	-
36.5	46.0	39.5
37.1	53	41.7
39.9	61	39.5
42.4	73	-
48.23	90.0	-
52.95	97.8	37.0
60.46	105.5	-
69.25	111.9	-
76.56	116.5	-
83.81	120.0	-
91.61	122.8	-
100	126.0	-

(1+1)

α -Naphthylamine ($C_{10}H_9N$) + Pyrocatechol
($C_6H_6O_2$)

Philip and Smith, 1905

%	f. t.	%	f. t.
100	103.2	31.4	42.7
90.9	94.0	28	43.4
65.6	83.0	19.3	40.95
54	71.3	16.9	31.3
43.5	56.3	11	38.4
37.6	45.2	"	36.95
"	41.65	8.1	41.3
33.1	42.05	0	48.0

α -Naphthylamine ($C_{10}H_9N$) + Resorcinol
($C_6H_6O_2$)

Philip and Smith, 1905

%	f. t.	%	f. t.
100	108.8	24.3	56.3
80	98.2	18.3	48.8
66.8	88.5	13.3	41.0
55.9	77.5	"	38.0
54.4	75.25	11	38.6
48	67.1	"	38.2
"	65.05	7.1	42.1
43.4	65.05	0	48.1
33.4	62.6		(1+1)

Vignon, 1891

%	mol %	f. t.
0	0	50
27.76	33.33	61
43.48	50	67
60.59	66.67	77
100	100	110

α -Naphthylamine ($C_{10}H_9N$) + o-Nitrophenol
($C_6H_5O_2N$)

Kremann and Grasser, 1916

%	f. t.	%	f. t.
E : 14.0°			
0	48.0	55.7	19.0
12.6	40.5	56.7	19.0
19.6	35.0	59.0	21.0
22.4	33.0	60.6	22.0
29.2	27.5	65.8	26.0
35.5	23.0	72.6	30.0
42	18.0	77.7	32.7
46.8	14.5	83.5	35.5
47.2	14.5	88.6	38.0
51.8	16.0	97	41.5
52.5	16.8	100	43.0

α -Naphthylamine ($C_{10}H_9N$) + m-Nitrophenol
($C_6H_5O_2N$)

Kremann and Grasser, 1916

%	f. t.	%	f. t.
100	95.0	45.1	55.7
96.7	94.5	43.9	55.5
92.7	92.0	43.8	54.5
83.2	86.0	37.5	52.5
75.4	79.2	29.9	46.5
66.2	71.0	22.8	40.0
58.6	63.0	14.6	35.5
51.2	56.0	5.5	44.0
48.3	56.3	0	48.0

E : 33.5°

α -Naphthylamine ($C_{10}H_9N$) + p-Nitrophenol
($C_6H_5O_2N$)

Kremann and Grasser, 1916

%	f. t.	E
0	48.0	-
3.6	46.0	-
7.5	43.0	-
13.6	37.3	-
19.1	45.0	33.5
28.4	58.5	-
35.8	65.0	-
36.8	65.5	-
41.8	68.0	-
49.2	68.2	-
49.8	68.2	-
54.3	67.0	65.9
55.1	67.0	-
60.2	72.5	65.8
61.3	75.5	-
66.4	82.0	-
71.3	88.5	-
76.7	93.5	-
81.5	98.5	-
88.5	103.5	-
92.8	106.0	-
97.2	108.5	-
100	109.0	- (1+1)

α -Naphthylamine ($C_{10}H_9N$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Buehler and Heap, 1926

(1 + 1) f.t. = 107.3 - 107.7

Kremann and Grasser, 1916

%	f.t.	E
0	48.0	-
4.1	45.0	-
7.2	44.0	-
14.6	64.0	42
22.5	78.0	-
27.6	86.0	-
36.1	95.0	-
43.3	101.5	-
49.6	103.5	-
57.1	104.5	-
57.4	104.5	-
61.8	103.5	-
67.3	100.0	89.9
71.9	94.5	89.7
79.6	97.0	-
88	103.5	-
95.7	108.0	-
100	109.0	- (1+1)

α -Naphthylamine ($C_{10}H_9N$) + π -Aminophenol
(C_6H_7ON)

Kremann and Hohl, 1920

%	f.t.	E
0	48.0	-
2.9	45.0	-
8.8	41.5	-
13.6	38.0	36.0
17.1	36.7	-
19.5	45.0	-
22.3	53.3	36.0
22.4	53.0	36.0
27.8	65.0	-
33.0	75.0	-
38.2	82.0	-
42.9	87.0	-
46.6	90.5	-
50.2	93.5	-
52.9	95.8	-
56.7	98.5	-
60.2	100.5	-
65.3	103.0	-
69.3	105.0	-
72.8	106.5	-
77.3	109.0	-
80.1	110.0	-
84.3	112.1	-
85.8	112.8	-
93.5	115.3	-
100	118.0	-

α -Naphthylamine ($C_{10}H_9N$) + α -Naphthol
($C_{10}H_8O$)

Vignon, 1891

%	mol %	f.t.
0	0	50
29.87	33.33	46
46.00	50	56
63.02	66.67	70
100	100	92

Kremann and Strohschneider, 1918

%	f.t.	E
100	92.0	-
93.2	89.0	-
87.8	87.0	-
80.2	82.5	-
73.8	78.5	-
71	77.0	-
65.6	72.0	-
59.5	67.0	-
53.6	61.5	-
51	58.0	-
50	57.0	-
47.2	55.0	40.5
44.6	52.0	-
43.6	51.0	-
41.1	48.5	40.5
37	44.0	-
36.6	43.7	40.5
31.7	41.0	-
30.2	41.5	-
25.9	42.0	-
24	42.5	-
20.8	43.0	-
18	43.0	-
14.4	42.5	-
7.9	44.5	-
4	46.2	42.0
0	48.0	42.0 (4+1)

Kofler and Brandstätter, 1943

%	f.t.	%	f.t.
100	96	30	56
80	86	25	55
70	81	20	47
60	72	10	48
50	63	0	49
40	59		
E ₁ : 43°		E ₄ : 45°	
E ₂ : 47°		E ₅ : 60°	
E ₃ : 54°		E ₆ : 55°	

α -Naphthylamine ($C_{10}H_9N$) + β -Naphthol,
($C_{10}H_8O$)

Vignon, 1891

%	mol %	f. t.
0	0	50
29.87	33.33	66
46.00	50	75
63.02	66.67	92
100	100	122

Kremann and Strohschneider, 1918

%	f. t.	E
100	122.0	-
91.8	113.5	-
81.6	102.0	-
69.8	88.5	56.2
60.4	76.5	"
51.4	61.0	"
43.4	64.0	-
39.5	66.0	-
36.4	65.3	-
32.6	63.2	-
29.8	57.0	-
24.5	53.4	-
21.5	50.0	-
20.8	48.5	36.0
19	46.0	-
16	43.0	36.0
14.5	40.5	-
9.8	38.0	36.0
6	42.0	"
2	46.2	-
0	48.0	-
	(3+2)	

"
Kofler and Brandstätter, 1943

%	I	f. t.	II
100	122		122
95	118		118
90	115		114
80	108		105
70	100		95
60	89		82
50	76		65
45	76		-
40	76		-
30	72		-
20	66		-
10	50		-
5	46		-
0	49		-

α -Naphthylamine ($C_{10}H_9N$) + 1,4-Dihydroxy-
naphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	183.0	-
88.5	166.0	129
80.4	156.0	128
70.4	144.0	127
60.4	133.0	128
56.3	138.0	-
52.3	143.0	-
50.1	142.0	-
43.6	139.0	-
33.7	131.0	-
22.7	106.0	-
14.5	86.0	44
5.9	44.0	44
0	48.3	-
	(1 + 1)	

α -Naphthylamine ($C_{10}H_9N$) + 1,5-Dihydroxy-
naphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	250.0	-
59.6	234.0	-
52.7	228.0	-
50.1	226.0	-
47.8	224.0	-
38.7	210.0	-
30.3	192.0	43.0
17.9	163.0	-
6.2	66.5	44.0
0	48.3	-

α -Naphthylamine ($C_{10}H_9N$) + 1,6-Dihydroxy-
naphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	134.0	-
87.9	125.0	-
70.8	113.0	-
62.7	102.0	-
54.8	91.0	-
49.4	84.0	-
48.2	81.0	76
44.3	83.5	76
42.1	84.5	-
39.4	84.0	-
33	81.5	-
24.8	76.0	-
14.1	64.0	-
5.9	46.5	43.0
0	48.5	-
	(3+2)	

α -Naphthylamine ($C_{10}H_9N$) + 1,8-Dihydroxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	137.0	-
94.4	133.0	-
77.5	118.5	-
68.4	102.0	-
59.1	85.5	74.5
56.8	82.0	"
53.7	75.0	-
51.3	76.0	-
47.6	75.0	-
40.7	70.5	-
34.3	67.0	-
27.8	58.0	41.5
22.9	52.0	"
16.6	41.0	-
10.7	46.0	-
0	48.3	-
(1+1)		

α -Naphthylamine ($C_{10}H_9N$) + 2,6-Dihydroxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	216.0	-
57.2	180.0	-
51.1	170.0	-
44.2	161.0	-
36.2	148.0	-
23.8	120.0	46.0
12.4	84.0	-
5.7	61.0	45.0
0	48.3	-

α -Naphthylamine ($C_{10}H_9N$) + 2,7-Dihydroxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	186.0	-
80.1	176.0	-
72.6	168.0	-
67	162.0	-
62.7	155.0	-
59.1	151.0	-
55.7	144.0	-
53.5	141.0	-
50.4	137.0	-
45.2	124.5	-
38.6	109.0	-
27.7	83.0	-
18.6	62.0	35.0
9.3	35.0	-
2.5	45.0	-
0	48.3	-

α -Naphthylamine ($C_{10}H_9N$) + 2,3-Dioxy-naphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922.

%	f. t.	E
100	162.0	-
93.7	158.5	-
83.4	152.0	-
72.6	145.0	-
67.7	127.0	-
70.5	145.0	-
63.5	133.5	-
56.8	120.0	95.0
57.9	110.0	-
46.8	101.0	-
44.3	102.0	-
42.8	105.0	95.0
39.8	101.0	-
35.3	96.0	-
31.3	90.9	-
24.9	80.0	35.0
20	69.0	35.0
15.2	47.0	35.0
9.5	41.5	-
5.7	44.5	-
0	48.5	-
(3 + 2)		

β -Naphthylamine ($C_{10}H_9N$) + Phenol (C_6H_6O)

Kremann, 1906

%	f. t.	%	f. t.
0	109.0	52.3	82.0
7.4	104.0	57.4	80.0
13.8	99.0	65.1	76.5
19.7	93.0	72.5	71.5
25.7	89.0	79.5	66.0
33	83.0	87.3	51.0
38.3	83.5	95.4	37.5
43.3	83.5	100	40.5
47.9	83.0	(1+1)	

β -Naphthylamine ($C_{10}H_9N$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Csanyi, 1916

%	f. t.	%	f. t.
0	109.0	41.4	77.2
4.8	104.8	45.1	77.6
9.5	100.9	51.6	76.4
15.3	96.5	57.1	75.0
20.4	92.5	62	79.5
26.3	85.8	71.3	87.0
28	83.5	82.2	94.2
32.4	80.0	93	99.8
34.3	76.8	100	103.0
38.9	77.1		

β -Naphthylamine ($C_{10}H_9N$) + Resorcinol
($C_6H_6O_2$)

Kremann and Csanyi, 1916

%	f. t.	E
100	108.5-109	-
93.9	106.0	-
87	102.5	-
80.2	98.0	-
75	94.5	-
70.3	89.5	76
65.1	83.5	-
59	78.5	77
54.1	80.0	78.5
48.4	80.9	-
45.2	81.3	-
44	81.1	-
40	81.0	-
38.4	80.9	-
32	83.5	-
23.8	91.5	-
16.9	97.0	-
9.6	103.0	-
4.2	106.0	-
0	109.0	(1+1) -

Vignon, 1891

mol %	%	f. t.
0	0	112
33.33	27.76	76
50	43.48	74
66.67	60.59	69
100	100	110

β -Naphthylamine ($C_{10}H_9N$) + Hydroquinone
($C_6H_6O_2$)

Kremann and Csanyi, 1916

%	f. t.	E
0	109.0	-
1	107.5	-
3	120.5	106.0
8.4	132.5	105.6
12.2	136.5	-
14.4	139.0	-
17.8	140.0	-
24	141.5	-
31.9	141.5	-
33.3	141.5	-
35.2	140.8	-
40	139.8	-
40.7	140.0	-
45.6	139.0	-
46.4	138.5	-
56.7	143.5	138.5
59.5	145.0	-
68.8	151.1	-
80	157.2	-
90.9	162.5	-
100	168.0	-
	(1+2)	

Pushin and Rikovski, 1949

mol %	f. t.	E
100	172	-
90	167	137
80	161	139
70	153	140
60	145	140
55	141	141
50	142.5	-
45	143.5	-
40	144.5	-
33.3	145	-
25	144	108
20	142	108
10	133	110
5	125	110
0	110	(1+1) -

β -Naphthylamine ($C_{10}H_9N$) + Pyrogallol
($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E
0	109.0	-
3.2	107.0	-
7.5	107.0	-
14.9	116.0	105
18.9	119.1	-
21.1	120.0	-
27.2	121.5	-
35.4	121.5	-
38.8	120.8	-
41.4	119.9	-
45.0	118.7	108.3
48.6	117.9	107.6
51.7	116.2	-
53.2	115.2	-
55.2	114.8	-
57.8	112.5	108
61.6	110.0	108.3
63.8	108.0 E	-
66.5	110.2	-
70.7	113.5	108.3
75.1	115.3	-
80.6	118.0	-
89.8	122.4	-
95.8	124.6	-
100	126.0	-
	(2+1)	

β -Naphthylamine ($C_{10}H_9N$) + o-Chlorphenol
(C_6H_5OCl)

Tronov and Bortovoi, 1954 (fig.)

mol %	f. t.	mol %	f. t.
0	114	60	71
20	96	80	35
40	78	95	4 E
45	72 E	100	8
50	74 (1+1)		

β -Naphthylamine ($C_{10}H_9N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol %	f. t.	E
100	28	-
91	22.2	11.8
90	21.9	5
80	15.8	12.0
70	23.8	-
67	32.0	12.0
66	32.3	12.0
64	40.2	10.6
61	46.0	8.8
60	47.5	10.5
55	57	-
50	70	-
40	81	-
30	90	-
20	97	-
10	103	-
0	110	-

 β -Naphthylamine ($C_{10}H_9N$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f. t.	E
100	51	-
90	55.5	46
80	60	46
75	63	-
65	68	-
60	71	-
55	75	-
50	78	-
40	84	-
30	90	-
25	94	-
10	104	-
0	111	-

 β -Naphthylamine ($C_{10}H_9N$) + o-Cresol (C_7H_8O)
Pushin and Basara, 1927

mol %	f. t.	E	min
100	30	-	-
98	28	-	-
96	26	-	-
95	-	25.3	-
94	-	24.6	4.1
93	-	25.3	-
90	37	25.2	3.1
88	41	25.1	3.7
84	49	24.8	2.7
80	56	24.8	1.2
70	64.4	23.5	-
60	68.8	-	-
55	69.9	-	-
50	70.2	-	2.5
45	72.8	70.1	2.0
40	78.5	70.0	1.3
30	89	69.2	0.8
20	97	69.2	0.5
10	104	68.2	0.3
0	110	-	(1+1) -

 β -Naphthylamine ($C_{10}H_9N$) + m-Cresol (C_7H_8O)

Pushin and Basara, 1927

mol %	f. t.	E	min
100	5	-	-
98	- 0.5	-	-
96	- 2.2	-	-
94	-	-3.3	1.3
93	+ 2.3	-3.3	0.8
92	10.3	-6.2	0.7
90	14.0	-9.2	0.6
85	27.7	-18.0	-
80	35.2	-10.3	0.4
70	46.2	-	-
67	47.9	-	-
65	48.8	-	-
64	49.1	-	-
63	50.0	-	-
60	55.5	48.1	0.5
53	66.5	48.4	0.9
50	70.5	50.0	1.2
48	72	49.5	1.0
46	74	48.5	0.95
42	77	46.5	0.9
40	80	49.0	0.7
30	90	48.5	0.6
20	97	48.5	0.4
10	104	48	-
0	110	-	(1+1) -

 β -Naphthylamine ($C_{10}H_9N$) + p-Cresol (C_7H_8O)

Pushin and Basara, 1927

mol %	f. t.	E	min
100	36	-	-
97	34	-	-
95	31.5	-	-
93	-	29.1	-
92	-	28.9	-
90	33.8	23.7	-
89	38.0	26.6	-
88	39.5	28.2	-
85	48.0	23.3	-
80	57.5	23.5	-
70	67.0	19.0	-
60	74.0	17.2	-
58	74.1	-	-
55	74.3	-	-
53	75.0	-	-
50	76.0	-	2.6
47	76	-	-
45	78	76	2.3
43	80	76	2.1
40	83	76	1.7
35	86.5	75	1.5
30	90	74.5	1.2
25	94.5	75	0.8
20	98.5	74	0.7
16	100.7	75.5	-
15	102	74	-
10	105	74	0.5
0	110	-	(1+1) -

β -Naphthylamine ($C_{10}H_9N$) + α -Naphthol ($C_{10}H_8O$) Vignon, 1891			Kofler and Brandstätter, 1943			
mol %	%	f. t.	%	f. t.	%	f. t.
0	0	112	0	112	60	63
33.33	29.87	54	10	106	70	74
50	46.00	64	20	100	80	83
66.67	63.02	70	30	92	90	90
100	100	92	40	81	100	96
			50	68		
Kremann and Strohschneider, 1918			β -Naphthylamine ($C_{10}H_9N$) + β -Naphthol ($C_{10}H_8O$) Vignon, 1891			
%	f. t.	E	mol %	%	f. t.	
0	109.0	-	0	0	112	
4.3	105.8	-	33.33	29.87	68	
9.3	102.3	-	50	46.00	74	
16.2	97.0	-	66.67	63.02	93	
23.2	90.2	-	100	100	122	
30.4	83.5	-				
39.8	72.0	47.0				
47.0	61.0	-				
54.5	50.0	-				
54.6	50.5	47.0				
62.1	58.5	-				
68.3	68.0	47.0				
70.5	70.0	-				
79.0	78.5	47.0				
86.5	84.5	-				
95.4	90.0	-				
100	92.0	-				
Rheinboldt, 1925			Kremann and Strohschneider, 1918			
%	f. t.	E	%	f. t.	E	
0.0	111.0	109.5	100	122.0	-	
19.8	97.5	53.0	93.7	118.0	115	
29.5	88.0	52.5	91.8	116.0	-	
40.6	77.0	52.5	86.8	117.0	115	
49.8	64.0	52.0	85.9	117.0	-	
60.6	60.0	"	81.6	118.0	-	
71.9	74.0	"	77.9	119.5	-	
80.8	83.0	"	73.8	120.0	-	
90.2	90.0	52.5	68.4	120.2	-	
100.0	96.0	95.0	67	120.3	-	
			62.4	120.0	-	
			60.3	119.0	-	
			55.7	118.5	-	
			51.5	118.0	-	
			47.5	117.5	-	
			42.1	116.0	-	
			39.7	115.0	-	
			37.2	114.0	104	
			34.5	114.0	-	
			34	113.5	-	
			27.8	111.0	-	
			20	108.0	104	
			13	104.8	-	
			6	106.7	-	
			0	109.0	-	
				(1+2)		
Rheinboldt and Kircheiser, 1926						
%	f. t.	E				
0.0	111.0	109.5				
13.2	103.5	54.5				
22.2	96.0	54.0				
34.4	84.0	53.0				
52.4	60.0	52.0				
61.0	62.0	53.0				
68.2	73.0	52.5				
81.7	86.0	53.0				
86.7	88.5	53.0				
100.0	96.0	95.0				

Grimm, Gunther and Tittus, 1931 (fig.)

%	f. t.	E
100	122.5	111
92.5	111	111
90	114	111
80	120	111
70	123	111
60	123	111
50	121	
40	117	104
30	113	103.5
20	107	103
17	102	103
10	103.5	103
0	111 (1+2)	103

Hrynakowski and Szmytowna, 1934

mol %	f. t.	m. t.
94.97	121.5	120.5
90.94	121.8	120.0
89.94	122.3	120.0
84.91	122.7	120.0
79.89	122.3	120.0
74.87	122.7	119.5
69.85	122.8	118.8
64.84	122.8	118.8
59.83	123.0	118.0
54.83	123.0	117.8
49.83	122.8	116.3
44.825	122.0	115.0
39.83	121.2	112.0
34.84	120.5	108.3
29.86	119.0	107.0
24.87	115.3	105.5
19.89	111.3	105.5
14.91	109.4	105.5
9.94	108.7	105.5
4.94	110.5	106.5
0	112.0	-

Kofler and Brandstätter, 1943

%	f. t.	m. t.
100	122	122
90	122	120
80	123.5	122
70	125	122.5
60	126.5	123
50	127	119
40	125.5	109
30	121.5	109
20	114.5	109
10	109.5	109
0	112	112

A. Kofler, 1942

(1+2), gives two layers with naphthylamine

Kofler and Baumeister, 1942 (fig.)

%	t ₁	t ₂
100	134	-
80	150	123
60	167	137
40	-	148
20	-	159
0	-	168

t₁ and t₂ are temperatures, where $n_D = 1.6010$ and 1.6128 resp. β -Naphthylamine (C₁₀H₉N) + 1,4-Dioxynaphthalene (C₁₀H₆O₂)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
0	111.0	-
3.6	110.0	-
7.7	109.0	-
11.9	105.0	-
15.8	103.0	-
20.1	100.0	96
24	98.0	"
27.8	110.0	-
33.2	129.0	-
40.8	138.0	-
45.8	140.0	-
50.0	142.0	-
57.2	141.0	-
61.5	131.0	-
64.5	125.0	-
71.8	139.0	-
84.2	164.0	-
100	183.0	-

(1+1)

β -Naphthylamine ($C_{10}H_9N$) + 1,5-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
0	111.0	-
3	109.0	107.0
5	109.0	"
16.9	149.0	-
23.1	174.5	-
28.8	193.0	107.0
34.9	206.0	-
38.5	214.0	-
40.7	217.0	-
45.7	225.0	-
48.2	228.0	-
50.2	228.5	-
56.4	228.5	-
61.6	224.0	-
68.5	227.0	212.0
71.3	232.0	"
79.7	239.0	"
88.7	247.0	"
100	250.0	-
(1+1)		

β -Naphthylamine ($C_{10}H_9N$) + 1,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	133.0	-
88.2	129.0	-
82.4	125.0	-
73.2	113.0	92.0
65.9	103.0	"
59.2	94.0	-
52.6	101.0	92-91
48.7	107.0	-
44.5	110.0	-
36.8	106.0	95, 96
29.2	103.0	"
22.1	107.0	"
8.2	110.0	-
0	111.0	-
(3+2)		

β -Naphthylamine ($C_{10}H_9N$) + 1,8-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	137.0	-
92.6	135.0	-
80.4	125.0	-
72.1	110.0	-
65.5	93.0	-
60.4	111.0	75
60.3	109.5	"
52.9	124.0	-
51.6	120.0	76
49	111.0	"
46.84	-	75.5
46.5	95.0	76
41.5	81.0	-
27.6	95.0	-
20	100.5	-
13.1	105.0	-
6.8	109.0	-
0	111.0	-
(1+1)		

β -Naphthylamine ($C_{10}H_9N$) + 2,6-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	216.0	-
92.1	206.0	-
86.2	201.0	-
78.8	193.0	-
75.1	188.0	-
71.7	182.0	-
68.6	180.0	-
64.7	172.0	-
60.2	164.0	-
57.6	166.0	-
56	167.0	-
44.2	170.5	-
41.2	170.7	-
37.3	171.0	-
34.5	170.8	-
29.4	169.5	-
25.5	168.0	-
19	163.0	-
16	161.0	-
11	148.0	-
2.4	122.0	109.0
0	111.0	-
(2 + 1)		

β -Naphthylamine ($C_{10}H_9N$) + 2,3-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E
100	162.0	-
97.3	161.0	-
91.8	158.0	-
84.7	153.0	-
78	148.0	144
72.6	149.6	"
66.3	156.0	-
61.1	160.0	-
58.3	163.0	144
53.7	168.0	-
50.5	167.5	-
49.5	161.0	-
37.3	155.0	-
29.6	145.0	-
19.4	130.0	-
9.6	115.0	-
1.6	107.0	-
0	111.0	-
(1+1)		

β -Naphthylamine ($C_{10}H_9N$) + m-Aminophenol (C_6H_7ON)
Kremann and Hohl, 1920

%	f. t.	E
0	108.8	-
2.4	106.9	-
5.9	104.5	-
9.2	102.0	-
12.7	100.0	-
16.0	98.0	-
19.5	96.0	-
22.9	94.0	-
26	92.0	89.5
29.3	90.5	-
31.6	90.0	-
33.8	90.5	-
36.4	90.8	-
39	91.0	-
41.7	"	-
44.88	"	-
46.8	"	-
49.0	90.0	-
49.6	92.0	-
52.3	93.5	-
52.8	93.0	-
53.3	93.8	-
54.7	94.5	-
55.8	95.5	-
56	96.0	-
57.6	97.0	-
60	98.5	91.0
60.1	98.5	-
63.8	101.5	-
66	103.3	-
69.5	104.8	-
72.4	106.8	-
75.6	108.7	-
79.5	110.0	-
83.3	111.8	-
86.8	113.1	-
91.4	115.2	-
96.1	117.1	-
100	118.0	-
(1+1)		

β -Naphthylamine ($C_{10}H_9N$) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Grasser, 1916

%	f. t.	E
100.0	43.0	-
94.5	41.5	-
88.2	38.5	-
83.4	36.0	-
77.1	46.0	35.9
74.0	51.0	"
71.1	55.0	-
68.6	57.0	-
66.7	57.0	-
61.2	66.5	-
60.3	66.0	35.8
57.1	70.5	-
51.7	75.0	-
45.4	80.0	-
35.5	87.5	-
26.6	93.0	-
19.7	97.0	-
8.4	104.5	-
0.0	109.0	-

β -Naphthylamine ($C_{10}H_9N$) + p-Nitrophenol ($C_6H_5O_2N$)

Kremann and Grasser, 1916

%	f. t.	E
0.0	109.0	-
4.0	106.0	-
7.9	102.5	-
15.4	98.0	-
24.1	90.5	-
30.0	84.0	-
32.3	81.5	-
36.4	78.6	-
43.7	80.5	-
49.8	81.0	-
57.2	80.6	-
64.7	78.0	-
68.0	82.0	-
71.2	85.5	78
75.6	90.0	-
81.6	96.5	-
89.3	103.5	-
96.0	108.0	-
100.0	109.0	(1+1)

β -Naphthylamine ($C_{10}H_9N$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann and Grasser, 1916

%	f. t.	%	f. t.
100.0	95.0	46.6	67.0
88.8	91.0	45.9	68.0
81.6	85.5	40.4	75.0
71.7	75.5	30.9	86.0
62.4	64.0	21.6	93.8
59.2	62.0	14.7	99.5
57.1	62.7	10.1	103.5
53.1	63.5	3.1	106.5
52.7	63.2	0.0	109.0

β -Naphthylamine ($C_{10}H_9N$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Grasser, 1916

%	f. t.	E	%	f. t.	E
100.0	109.0	-	45.30	72.3	-
96.2	106.5	-	40.20	72.0	-
90.4	104.0	-	34.60	79.0	-
82.0	99.0	-	29.50	85.0	-
74.8	94.5	-	24.10	91.5	-
67.8	89.0	-	18.15	97.0	-
57.8	80.0	72	11.44	102.0	-
53.60	75.0	-	4.77	107.0	-
49.50	72.0	-	0	109.0	-

(1+1)

Buehler and Heap, 1926

(1 + 1) f. t. = 77.6 - 77.9°

β -Naphthylamine ($C_{10}H_9N$)
+ 2,7-Dioxynaphthalene ($C_{10}H_8O_2$)

Kremann, Hemmelmayr and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	186.0	-	47.8	162.5	-
96.2	183.0	-	42.7	161.5	-
90.3	179.0	-	37.6	158.0	-
82.2	172.0	-	30.4	151.0	-
73.2	164.0	155	25.7	144.0	-
68.4	160.0	155	17.1	130.5	-
61.6	159.0	-	6.8	116.0	-
56.7	162.5	-	4.2	112.0	108
53.4	163.0	-	0	111.0	-

(1+1)

1,5-Naphthylenediamine ($C_{10}H_{10}N_2$) + p-Cresol
(C_7H_8O)

Pushin and Sladovic, 1928

mol %	f. t.	E	mol %	f. t.	E
100	33	-	63	119.2	118
95	31.6	-	60	125	116.5
90	-	29	55	128.2	116.1
87	106	28.7	50	136.5	111
85	109	-	40	145	107.8
84.2	110	-13.5	30	154.6	86.7
80	114.2	-	20	164.1	-
75	116.9	-	10	170.5	-
66.7	118	-	0	189	-

(1+2)

1-Brom-2-naphthylamine ($C_{10}H_8NBr$) + Picric acid
($C_6H_3O_7N_3$)

Hertel, 1926

mol %	f. t.	mol %	f. t.
100	116	40	170.5
90	112	30	150
80	136	20	115
70	155	10	96
60	171	4	60
50	173 (1+1)	0	66

1-Brom-4-naphthylamine ($C_{10}H_8NBr$) +
2,6-Dinitrophenol ($C_6H_4O_5N_2$)

Hertel, 1926

f. t.		
mol %	I	II
100	64.5	64.5
94	59.5	-
90	64	55
80	75	65
70	84	75
60	89.5	82
50	91.5 (1+1)	85 (1+1)
40	90	82.5
30	87.5	80
20	89	89
10	97	97
0	102	102
E ₁ :		59
E ₂ :		85
		79

Pyrazole ($C_3H_4N_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.	
0	187.5	Az
33	191.5	
100	182.2	

Pyrazole ($C_3H_4N_2$) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.	
0	187.5	Az
74	194.8	
100	191.1	

Piperidine ($C_5H_{11}N$) + Phenol (C_6H_6O)

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
45°			
0	1.4404	66.6	1.5420
10	.4540	70	.5456
20	.4678	72.9	.5495
30	.4830	75	.5511
40	.4972	77	.5525
50	.5143	80	.5543
60	.5323	90	.5500
64.3	.5390	100	.5402

Piperidine ($C_5H_{11}N$) + o-Cresol (C_7H_8O)

Pushin and Rikovski, 1949

mol %	f. t.	mol %	f. t.
0	-11	70	29.5
50	+ 7	75	24.5
60	27	80	17
100	31	100	30

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
40°			
0	1.4431	66.6	1.5282
10.6	.4572	69.5	.5310
20.2	.4704	74.6	.5348
30.2	.4830	79.1	.5365
40.2	.4962	84.0	.5382
50.4	.5092	90	.5380
60.0	.5210	100	.5366
62.7	.5243		

Piperidine ($C_5H_{11}N$) + m-Cresol (C_7H_8O)

Pushin and Matavulj, 1932

mol %	n_D		
	20°	25°	40°
0	1.4534	1.4509	1.4431
9.5	-	.4626	-
15.2	.4730	-	.4632
24.8	-	.4828	-
30.0	.4926	-	.4830
40.4	-	.5028	-
41.6	-	.5060	-
45.5	-	.5098	-
50.0	.5201	.5176	.5100
55.3	-	.5245	-
57.6	-	.5286	-
59.2	-	.5300	-
60.0	.5343	.5318	.5240
63.0	.5386	.5358	.5278
64.4	-	.5374	-
66.7	.5430	.5401	.5320
68.6	-	.5414	-
69.4	.5454	-	.5348
70.0	-	.5430	-
74.6	.5499	-	.5395
75.0	-	.5470	-
80.1	.5524	.5499	.5424
84.8	-	.5510	-
89.7	-	.5484	-
94.6	-	.5440	-
100.0	.5406	.5384	5317

Piperidine ($C_5H_{11}N$) + p-Cresol (C_7H_8O)

Pushin and Sladovic, 1928

%	f. t.	E
100	34.4	-
95	29.5	-
90	21.5	-
87	17.0	-
80	23.5	-
75	36	-
70	40.9	-
66.7	42.1	-
65	41.9	-
60	39.5	-
55	33	-
50	23	-
45	9.7	-
40	- 5.6	-
30	-28.6	-36.7
25	-31.7	-37.7
20	-27.5	-39.5
10	-20	-
0	-12 (1+2)	-

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
40°			
0	1.4431	72.1	1.5360
10.1	.4562	75.0	.5380
20.3	.4700	76.6	.5394
30.3	.4820	79.8	.5410
40.4	.4960	80.3	.5408
49.7	.5080	84.6	.5416
60.0	.5224	84.8	.5418
62.7	.5258	90.0	.5396
66.6	.5306	100.0	.5316
70.0	.5340		

Piperidine ($C_5H_{11}N$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f. t.	E
100	51	-
90	43	-
80	31	-
75	22	-
70	15	-
66.6	6	-
60	7	-
55	11.5	-
50	14	-
40	7	-
30	-10	-32
23	-28.5	-32
20	-26.5	-32
15	-21	-32
10	-16	-
0	-11 (1+1)	-

Pushin and Matavulj, 1932

mol %	n_D	60°
20°		
0	1.4534	1.4324
4.9	-	.4386
10.3	.4670	.4480
20	.4788	.4610
34	-	.4750
39.7	.4990	.4812
42.9	.5020	.4841
46.2	.5050	.4870
49.9	.5080	.4899
52.8	.5099	.4917
55.0	-	.4928
56.9	.5123	.4940
60.2	.5141	.4957
70.7	.5189	.5000
89.7	.5226	.5038
100.0	.5228	.5044

Piperidine ($C_5H_{11}N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Rikovski, 1937

mol %	f. t.	mol %	f. t.
0	-11	60	72.5
8	-16.5	70	74
10	-12	80	68
20	+11.5	90	50
30	34.5	97	25.5
40	53.5	100	28
50	66		
(1+2)			

Pushin and Matavulj, 1932

mol %	n_D	66°
20°		
0	1.4534	1.4406
10	-	.4558
20	-	.4712
30	-	.4870
40	-	.5010
45	-	.5090
50	-	.5030
55	-	.5258
60	.5518	.5326
63.0	.5567	-
63.1	-	.5375
65	-	.5220
66.7	.5611	.5412
69.0	.5630	-
70.0	-	.5437
70.6	.5640	-
75.0	.5644	.5440
80	-	.5430
90	-	.5380
100	.5441	.5318

Piperidine ($C_5H_{11}N$) + o-Chlorphenol (C_6H_5OC1)

Pushin and Rikovski, 1949

mol %	f. t.	mol %	f. t.
0	-11	70	110
50	+80	75	107
60	108	100	7
66.7	111	(1+2)	

Piperidine ($C_5H_{11}N$) + p-Chlorphenol (C_6H_5OC1)

Pushin and Rikovski, 1949

mol %	f. t.	mol %	f. t.
0	-11	70	68
50	+40	75	75
60	65.5	100	34
66.7	70		

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
65°			
0	1.4300	62.6	1.5432
9.7	.4482	66.4	.5482
19.9	.4680	69.0	.5495
29.9	.4865	69.3	.5508
40.3	.5080	74.9	.5545
50.0	.5224	79.6	.5560
56.4	.5340	90.0	.5552
60.0	.5398	100.0	.5480

Pyridine (C_5H_5N) + Phenol (C_6H_6O)

Hatcher and Skirrow, 1917

%	f. t.	%	f. t.
0	-37.5	60.14	- 5.3
8.63	43.5	63.15	- 1.0
13.72	43.0	66.7	+ 2.5
17.95	54.0	69.8	+ 3.8
21.2	55.5	74.5	+ 2.5
28.55	38.0	77.42	- 2.0
37.71	22.0	79.7	- 2.7
43.37	15.5	83.6	+ 9.5
48.1	11.0	90.93	29.3
52.91	9.5	95.24	35.6
55.13	9.0	100	40.8
57.61	10.3	(1+1)	(1+2)

Bramley, 1916

%	mol %	f. t.
0	0	-40.7
7.82	6.66	-45.8
14.08	12.08	-50.3
21.94	19.12	-56.9
36.45	26.90	-35.0 -65.7
40.02	35.9	-20.2
45.03	41.15	-14.0
49.43	45.05	-10.8
53.27	48.9	- 9.7
56.50	52.2	-10.2
59.65	55.4	- 4.19
61.10	56.9	- 2.15
64.51	60.45	+ 2.5
69.29	65.5	5.4
71.68	68.0	5.4
74.42	70.9	4.0
77.32	74.15	+1.3 -17.6
80.67	77.75	+ 1.7
81.96	79.3	6.55
90.24	88.7	28.6
100	100	41.0
E_1 : 19.2 mol %		-57.0°
E_2 : 53.7 mol %		-10.8°
E_3 : 76.8 mol %		- 2.4°
(1+1)	(1+2)	

Vinogradova, Tikhomirova and Efremov, 1936

%	f. t.	E
100	41.3	-
95	36.3	-
90	28.2	- 5.6
85	16.6	- 2.7
80	1.8	- 2.5
77.5	1.3	-
75	3.6	- 2.4
70.42	5.6	-
67.5	4.7	-
65	3.3	-13.7
60	- 3.5	-12.4
57.5	- 8.6	-
54.34	- 9.3	-
52.5	- 9.7	-
50	-10.1	-63.0
45	-14.0	-
40	-20.0	-58
35	-27.2	-57.5
30	-35.4	-
25	-47.8	-57.3
20	-55.5	-57.3
15	-51.0	-59.5
10	-47.0	-
5	-43.5	-
2.5	-42.1	-
0	-40.5	-
(1+1)	(1+2)	

Bramley, 1916			
%	d		
	20°	30°	40°
0.00	0.9819	0.9723	0.9627
8.30	.9916	.9820	.9724
16.12	1.0005	.9909	.9814
24.36	.0096	1.0002	.9909
32.58	.0187	.0096	1.0005
38.94	.0258	.0167	.0077
47.13	.0349	.0260	.0173
54.96	.0429	.0343	.0257
63.81	.0514	.0426	.0341
70.49	.0568	.0482	.0397
77.94	.0620	.0534	.0449
85.17	.0668	.0583	.0498
92.45	.0710	.0625	.0540
100.00	.0752	.0668	.0584

%	d		
	60°	80°	110°
0.00	0.9424	0.9218	0.8900
8.30	.9524	.9324	.9014
16.12	.9620	.9428	.9119
24.36	.9720	.9532	.9234
32.58	.9821	.9639	.9347
38.94	.9897	.9718	.9430
47.13	.9995	.9821	.9535
54.96	1.0003	.9910	.9626
63.81	.0168	.9995	.9719
70.49	.0226	1.0053	.9779
77.94	.0279	.0107	.9833
85.17	.0327	.0155	.9878
92.45	.0369	.0198	.9923
100.00	.0414	.0242	.9967

%	d		%	d	
	10°				
0.00	0.9916	58.46	1.0544		
17.26	1.0101	66.99	.0618		
26.01	.0196	76.81	.0700		
35.14	.0294	82.86	.0742		
45.48	.0412	91.89	.0787		
51.89	.0479	100.00	.0836		

Vinogradova, Tikhomirova and Efremoff, 1936.				
%	d			
	19.5°	25°	40°	45°
100	-	-	1.0626	1.0579
90	1.0698	1.0663	.0546	.0507
80	.0640	.0605	.0485	.0447
75	.0606	.0567	.0448	.0408
70	.0570	.0530	.0410	.0370
60	.0475	.0441	.0324	.0285
54.34	.0415	.0380	.0263	.0224
50	.0387	.0342	.0220	.0179
40	.0305	.0256	.0125	.0080
37.3	.0275	.0231	.0100	.0057
30	.0195	.0145	.0018	0.9970
25	.0144	.0081	0.9969	.9918
20	.0090	.0040	.9907	.9863
10	0.9970	0.9922	.9785	.9739
0	.9875	.9825	.9700	.9638

%	d		
	50°	75°	100°
100	1.0532	1.0324	1.0118
90	.0468	.0266	.0064
80	.0400	.0202	.0000
75	.0369	.0167	0.9965
70	.0330	.0122	.9920
60	.0246	.0037	.9828
54.34	.0185	0.9975	.9765
50	.0138	.9934	.9725
40	.0035	.9818	.9603
37.3	.0013	.9795	.9577
30	0.9923	.9716	.9499
25	.9868	.9657	.9445
20	.9818	.9605	.9393
10	.9693	.9476	.9258
0	.9577	.9342	.9106

Bramley, 1916			
%	η		
	20°	30°	40°
0.00	941	821	714
8.30	1109	940	828
16.12	1321	1106	965
24.36	1597	1339	1152
32.58	2010	1634	1399
38.94	2411	1963	1631
47.13	3215	2515	2042
54.96	4370	3245	2560
63.81	5945	4290	3245
70.49	7480	5170	3900
77.94	9070	6061	4305
85.17	10040	6625	4590
92.45	10720	6915	4705
100.00	11040	7090	4740

%	η		
	60°	80°	110°
0.00	578	487	385
8.30	656	544	428
16.12	753	614	475
24.36	879	713	535
32.58	1032	815	606
38.94	1198	934	669
47.13	1436	1077	751
54.96	1727	1263	841
63.81	2065	1446	935
70.49	2300	1580	988
77.94	2500	1655	1013
85.17	2590	1670	1012
92.45	2590	1650	985
100.00	2520	1580	941

%	η		%	η	
	10°				
0.00	1108	58.46	6800		
17.26	1594	66.99	9880		
26.01	2050	76.81	14160		
35.14	2675	82.86	16440		
45.48	3760	91.89	18800		
51.89	5050	100.00	20100		

Vinogradova, Tikhomirova and Efremoff, 1936.

Vinogradova, Tikhomirova and Efremoff, 1936

%	25°	40°	η 50°	75°	100°
100	-	4150	2680	1280	800
90	7490	4120	2810	1300	740
80	6900	3790	2700	1340	740
75	6380	3560	2610	1270	740
70	5600	3290	2420	1230	690
60	4110	2640	1960	1070	670
54.34	3370	2180	1700	960	600
50	3090	2010	1540	900	570
40	2820	1600	1250	790	500
37.3	2100	1460	1190	730	500
30	1700	1220	990	640	450
25	1550	1160	950	620	420
20	1400	1040	870	570	400
10	1160	910	710	540	350
0	920	720	610	440	330

%	σ 19.5°	45°
100	-	37.1
90	42.39	37.8
80	42.75	38.2
75	42.95	-
70	43.13	38.8
60	43.45	-
54.34	43.51	-
50	43.60	39.1
40	43.52	39.1
37.3	43.45	-
30	43.14	38.8
25	42.10	-
20	41.83	-
10	39.87	35.2
0	36.41	32.5

Pushin and Matavulj, 1933

mol %	n_D	mol %	n_D
45°			
0	1.4958	53	1.5318
10	.5038	57	.5334
20	.5111	60	.5344
25.9	.5153	69.9	.5371
30	.5179	79.8	.5387
40	.5248	89.5	.5395
46.8	.5288	100.0	.5402
50	.5306		

Timofeev, 1905

initial	%	final	Qdil (by mole phenol)
0		1.8	+1.57
1.8		4.1	+1.62
15.5		17.5	+1.50
33.1		34.3	+1.20
47.0		47.8	+0.63

Taboury and Lestrade, 1947

Raman Spectra in the liquid

Pyridine (C_5H_5N) + Resorcinol ($C_6H_6O_2$)

Hrynakovski and Ellert, 1939

%	f. t.	E
0	-40.2	-
10	-46.5	-51.6
20	-37.5	-50.5
30	-11.8	-51.8
40	+ 1.5	-
50	-	-
60	10	-
70	50	-
80	80.5	-
90	100	-
100	111.3 (1+1)	-

Timofeev, 1905

%	U
20°	
0	0.405
19.3	0.4120

initial	%	final	Qdil (by mole resorcinol)
0		2.2	+4.67
2.2		5.3	+4.61
24.1		24.9	+3.19

Pyridine (C_5H_5N) + Hydroquinone ($C_6H_6O_2$)

Hrynakovski and Ellert, 1939

%	f. t.	E
0	-40.2	-
5	-36.5	-45.5
10	- 8	-44.5
20	+15	-44.3
30	+33	-
35	+46	+33
40	+58	+33
50	+75	+35
60	+86	+78.2
65	+115.8	+78
70	+126.5	+77.8
100	+172.0 (1+2)	-

Pyridine (C_5H_5N) + Pyrocatechol ($C_6H_6O_2$)

Hrynakowski and Ellert, 1939

%	f. t.	E
0	-40.2	-
10	-28.5	-45.5
15	-15	-46
20	-2	-45
30	+11	-
40	16.8	-
50	13	+ 9
60	20.3	10
65	35	10.5
70	46	5
80	75	7.8
90	93	-
100	105.0	(1+1) -

Pyridine (C_5H_5N) + Pyrogallol ($C_6H_6O_3$)

Hrynakowski and Ellert, 1939

%	f. t.	E
0	-40.2	-
5	-43.8	-46.4
10	-45.8	-
20	?	?
30	?	?
40	+29	-
50	38	-
60	52.5	+44
65	63	45.5
70	71.5	44.5
80	89	47
90	110	46
100	132	-

Pyridine (C_5H_5N) + o-Cresol (C_7H_8O)

Hatcher and Skirrow, 1917

%	f. t.	%	f. t.
0	-37.5	65.34	- 4.0
7.65	41.5	70.15	13.0
13.9	46.0	74.57	21.0
19.83	41.0	78.13	-12.0
33.37	16.0	81.77	+ 2.2
39.11	9.0	85.97	11.5
48.27	- 1.0	90.47	19.4
54.14	+ 1.0	100	29.4
58.87	+ 1.0		(1+1)

Bramley, 1916

%	mol %	f. t.
0	0	-40.7
7.13	5.33	-44.6
13.08	9.92	-48.9
18.75	14.43	-44.5
24.29	20.12	-32.45
31.06	24.5	-24.6
36.73	29.8	-16.7
42.78	35.45	- 8.9
48.32	40.65	- 3.9
53.10	45.3	0
58.52	51.0	+ 1.2
63.34	55.9	- 0.95
67.04	59.8	- 5.2
68.96	62.4	- 9.3
71.90	65.15	-48.1
"	"	-15.8
76.88	70.9	-20.7
81.16	75.75	- 2.25
85.88	81.3	+10.2
91.52	88.8	+19.9
96.94	95.9	+26.75
100	100	+29.75
E : 11.9 mol %		-50.95°
68.2 mol %		-33.8° (1+1)

%	0°	10°	20°	30°
0.00	1.0013	0.9916	0.9819	0.9723
12.05	.0100	1.0005	.9912	.9818
24.55	.0197	.0104	1.0012	.9928
33.60	.0267	.0178	.0091	1.0005
45.83	.0364	.0279	.0196	.0112
55.96	.0438	.0355	.0273	.0190
66.83	.0514	.0430	.0348	.0265
77.73	.0574	.0491	.0408	.0324
85.72	.0606	.0522	.0439	.0356
91.85	.0629	.0545	.0461	.0376
100.00	.0654	.0568	.0483	.0399

%	40°	60°	80°	110°
0.00	0.9627	0.9424	0.9218	0.8900
12.05	.9722	.9531	.9340	.9040
24.55	.9835	.9653	.9472	.9178
33.60	.9918	.9742	.9565	.9276
45.83	1.0026	.9855	.9684	.9403
55.91	.0105	.9937	.9767	.9490
66.83	.0180	1.0013	.9846	.9570
77.73	.0238	.0070	.9901	.9623
85.72	.0270	.0099	.9929	.9649
91.85	.0290	.0117	.9946	.9664
100.00	.0312	.0137	.9963	.9678

%	0°	10°	20°	30°
0.00	1323	1108	941	821
12.05	1669	1396	1176	1022
24.55	2335	1900	1556	1350
33.60	3155	2490	1983	1724
45.83	5315	3910	2962	2560
55.91	9360	6310	4455	3625
66.83	18240	10680	6845	4935
77.73	31520	16140	9260	6230
85.72	37700	18110	10040	6565
91.85	39250	18370	10010	6450
100.00	39700	17900	9560	6125

Pyridine (C ₅ H ₅ N) + m-Cresol (C ₇ H ₈ O)				
Bramley, 1916				
%	40°	60°	80°	110°
0.00	714	578	487	385
12.05	886	703	577	451
24.55	1148	889	720	543
33.60	1436	1069	852	615
45.83	2045	1425	1060	732
55.91	2750	1784	1253	834
66.83	3575	2181	1467	945
77.73	4290	2460	1586	980
85.72	4415	2460	1573	969
91.85	4325	2395	1528	942
100.00	4100	2240	1431	897
Pushin and Matavulj, 1933				
mol %	n _D			
	10°	25°	50°	
0	1.5152	1.5071	1.4931	
15.3	.5253	.5176	.5045	
25.0	.5312	.5236	.5112	
35.1	.5368	.5298	.5177	
44.8	.5421	.5351	.5231	
50	.5444	.5374	.5256	
54.8	.5460	.5393	.5274	
59.6	.5477	.5407	.5288	
70.0	.5499	.5429	.5310	
74.7	.5504	.5436	.5315	
79.9	.5509	.5438	.5318	
84.9	.5512	.5441	.5320	
89	.5510	.5439	.5319	
94.8	.5509	.5438	.5318	
100	.5510	.5440	.5319	
Bramley, 1916				
%	U	%	U	
0-20°				
0	0.395	51.9	0.421	
9.55	.396	63.6	.437	
20.65	.400	76.5	.458	
32.68	.406	87.2	.477	
43.80	.414	100	.499	
%	Q mix (cal/100 g)	%	Q mix (cal/100 g)	
37.0	1270	59.8	1943	
42.35	1545	60.1	1938	
42.75	1547	63.6	1928	
49.15	1757	69.3	1822	
50.1	1787	74.95	1639	
51.3	1811	82.5	1265	
55.15	1897			
Pyridine (C ₅ H ₅ N) + m-Cresol (C ₇ H ₈ O)				
Bramley, 1916				
%	mol %	f. t.		
0	0	-40.7		
4.47	3.31	-43.0		
9.76	7.30	-45.9		
15.03	11.45	-49.05		
20.11	15.45	-52.7		
24.99	19.6	-55.6		
31.49	25.15	-61.5		
36.85	29.9	-67.0		
41.58	35.1	-74.5		
80.81	75.5	-38.3		
85.78	81.5	-20.2		
91.14	88.3	-7.1		
96.81	95.7	+ 1.15		
100	100	4.5		
%	d			
	0°	10°	20°	
0.00	1.0013	0.9916	0.9819	
14.09	.0098	1.0003	.9908	
27.45	.0181	.0088	.9995	
41.40	.0264	.0175	1.0086	
46.92	.0296	.0209	.0121	
55.33	.0345	.0260	.0174	
61.80	.0377	.0295	.0211	
70.62	.0418	.0336	.0254	
75.90	.0439	.0357	.0275	
85.17	.0467	.0385	.0303	
91.41	.0479	.0399	.0318	
100.00	.0493	.0413	.0333	
%	d			
	30°	40°	60°	
0.00	0.9723	0.9627	0.9424	
14.09	.9813	.9718	.9527	
27.45	.9902	.9809	.9630	
41.40	.9998	.9909	.9737	
46.92	1.0033	.9946	.9778	
55.33	.0089	1.0003	.9839	
61.80	.0128	.0045	.9882	
70.62	.0172	.0089	.9930	
75.90	.0193	.0110	.9951	
85.17	.0221	.0139	.9981	
91.41	.0237	.0155	.9997	
100.00	.0253	.0173	1.0015	
%	d			
	80°	110°		
0.00	0.9218	0.8900		
14.47	.9343	.9036		
26.75	.9447	.9154		
38.43	.9545	.9264		
50.72	.9644	.9375		
61.52	.9721	.9455		
70.94	.9772	.9511		
82.33	.9817	.9555		
90.88	.9836	.9576		
100.00	.9853	.9594		

PYRIDINE + P-CRESOL

%	η		
	0°	10°	20°
0.00	1323	1108	941
14.09	1791	1466	1228
27.45	2643	2105	1770
41.40	4280	3250	2540
46.92	5540	4015	3085
55.33	8780	5935	4250
61.80	12830	8040	5585
70.62	22050	12850	8160
75.90	30950	16640	9980
85.17	50000	23700	13080
91.41	64200	28550	14810
100.00	84400	34600	16900

$\%$	η	
	30°	40° 60°
0.00	821	714 578
14.09	1098	931 731
27.45	1461	1240 949
41.40	2125	1732 1267
46.92	2510	2022 1419
55.33	3350	2605 1755
61.80	4175	3150 2019
70.62	5570	3995 2425
75.90	6520	4565 2619
85.17	7885	5255 2850
91.41	8640	5590 2955
100.00	9470	5925 2995

θ	η	
	80°	110°
0.00	487	385
14.47	599	457
26.75	731	539
38.43	901	646
50.72	1147	775
61.52	1407	910
70.94	1629	1010
82.33	1820	1074
90.88	1848	1052
100.00	1808	1023

Pushin and Matavulj, 1933

mol %	$n_D^{25^\circ}$	$n_D^{50^\circ}$
0	1.5072	1.4932
20	.5198	.5070
40	.5300	.5177
44.9	.5322	.5200
49.7	.5340	.5221
52.4	.5349	.5230
54.8	.5356	.5238
59.5	.5369	.5251
68.9	.5386	.5271
79.6	.5393	.5280
89.5	.5395	.5282
100.0	.5393	.5282

Bramley, 1916

%	U	%	U
0-20°			
0	0.395	66.9	0.428
14.47	.397	72.5	.435
26.75	.402	80.5	.446
38.43	.407	90.9	.460
50.95	.415	100	.479
57.80	.420		

%	Q mix (cal/100 g)	%	Q mix (cal/100 g)
17.1	512	63.2	1523
31.75	920	66.9	1472
39.0	1138	72.5	1375
45.75	1306	80.5	1095
50.95	1409	90.15	622
57.8	1511		

Pyridine (C_5H_5N) + p-Cresol (C_7H_8O)

Hatcher and Skirrow, 1917

%	f. t.
0	-37.5
19.03	-49.0
25.78	-30.0
35.35	-15.5
45.37	- 5.0
49.2	- 2.0
52.28	- 0.5
54.91	+ 0.5
57.84	+ 1.5
59.26	- 8.5
59.94	- 0.5
62.1	- 3.0
64.25	0
68.84	+ 2.0
73.72	3.5
75.12	3.3
84.52	3.0
88.36	13.5
93.97	24.0
100	32.0

Bramley, 1916

%	mol %	f. t.
0	0	-40.7
6.66	4.96	-44.8
13.98	10.61	-48.9
19.94	15.42	-53.8
25.60	20.10	-31.0
30.47	24.30	-23.0
34.88	28.15	-16.7
40.33	33.10	- 9.8
45.53	37.97	- 4.5
50.65	42.85	- 0.3
56.59	48.90	+ 2.0
59.29	51.6	+ 1.4
62.62	55.15	- 2.4
		- 0.95
66.49	59.3	+ 2.6
69.87	63.0	5.0
73.52	67.0	6.2
77.62	71.65	4.4
82.19	77.2	- 2.4
88.39	84.75	+17.85
93.91	91.7	26.95
100	100	33.8

E : 12.8 mol % -50.8°
 55.0 mol % - 1.4° (1 + 2)
 77.0 mol % - 2.05° (2 + 3)

%	d		
	0°	10°	20°
0.00	1.0013	0.9916	0.9819
21.03	.0145	1.0051	.9957
29.61	.0200	.0108	1.0016
40.04	.0265	.0176	.0087
46.71	.0305	.0219	.0132
54.46	.0351	.0267	.0182
60.37	.0385	.0302	.0217
67.82	.0419	.0338	.0254
75.36	.0445	.0365	.0283
83.28	.0464	.0386	.0306
91.01	.0477	.0400	.0320
100.00	.0487	.0412	.0335

%	d		
	30°	40°	60°
0.00	0.9723	0.9627	0.9424
21.03	.9865	.9773	.9592
29.61	.9926	.9836	.9661
40.04	1.0000	.9913	.9744
46.71	.0046	.9962	.9795
54.46	.0099	1.0014	.9850
60.37	.0133	.0048	.9888
67.82	.0170	.0086	.9927
75.36	.0200	.0117	.9959
83.28	.0223	.0140	.9984
91.01	.0239	.0159	1.0005
100.00	.0257	.0177	.0026

%	d	
	80°	110°
0.00	0.9218	0.8900
14.06	.9343	.9037
27.48	.9462	.9165
41.10	.9575	.9291
54.03	.9679	.9410
63.11	.9741	.9474
71.88	.9792	.9527
81.72	.9828	.9566
89.95	.9850	.9588
100.00	.9868	.9604

%	η		
	0°	10°	20°
0.00	1323	1108	941
21.03	2178	1837	1451
29.61	2792	2251	1808
40.04	4165	3175	2535
46.71	5795	4205	3105
54.46	8670	5990	4215
60.37	12410	7870	5315
67.82	19080	11400	7365
75.36	31200	16750	10040
83.28	49850	23950	13240
91.01	72400	31130	16160
100.00	98400	39650	18950

%	η		
	30°	40°	60°
0.00	821	714	578
21.03	1363	1139	827
29.61	1628	1370	995
40.04	2115	1727	1245
46.71	2565	2065	1462
54.46	3310	2600	1773
60.37	4080	3115	2020
67.82	5265	3830	2348
75.36	6635	4660	2705
83.28	7970	5415	2970
91.01	9260	6020	3150
100.00	10540	6540	3280

%	η	
	80°	110°
0.00	487	385
14.06	603	460.5
27.48	747	551.5
41.10	955	676.5
54.03	1230	822.5
63.11	1463	940
71.88	1696	1047
81.72	1890	1120
89.95	1961	1111
100.00	1937	1081

Pushin and Matavulj, 1933

mol %	n_D	
	10°	40°
0	1.5157	1.4988
20.2	.5272	.5122
39.8	.5370	.5229
45.0	.5393	.5252
50.1	.5412	.5273
52.6	.5419	.5281
55.0	.5427	.5288
59.5	.5436	.5300
69.7	.5450	.5319
79.8	.5455	.5326
89.8	.5453	.5326
100.0	.5450	.5323

Pyridine (C_5H_5N) + 2,3-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	57	- 8 E
13	-52 E	70	+36
20	-39	80	+64
30	-25	90	+70
40	-10	100	+71.5
50	- 6 (1+1)		

Pyridine (C_5H_5N) + 2,5-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	60	+14
15	-53 E	70	+40
30	-29	80	+60
40	-16	90	+70
50	-10	100	+75

(1+1)

Pyridine (C_5H_5N) + 3,4-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	60	23
13	-47 E	70	37
20	-35	80	47
30	-18	90	59
40	- 4	100	64
50	+11		

Pyridine (C_5H_5N) + 3,5-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	50	- 4 (1+1)
15	-50 E	64	-15 E
30	-20	70	+19
40	- 9	80	25

Pyridine (C_5H_5N) + 3-Methyl-5-Ethylphenol
($C_9H_{12}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	70	+10
5	-43	80	+30
10	-50	90	+44
13	-54	100	+50

Pyridine (C_5H_5N) + 2,3,5-Trimethylphenol
($C_9H_{12}O$)

Parant, 1950 (fig.)

mol %	f. t.	mol %	f. t.
0	-40	50	-18 E
5	-40	60	+42
10	-47	70	+65
20	-56 E	80	+73
30	-33	90	+82
40	-23	100	(1+1) +93

Pyridine (C_5H_5N) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol %	f. t.	E	min
100	28	-	-
90	18.8	-	-
85	15.6	- 7.8	0.37
80	9.4	-	-
77	7.2	- 5	0.73
72	0	- 5.2	-
69	-	- 5.1	1.75
60	3.6	-10.8	0.35
50	5.6	-	-
40	3.6	-	-
30	-	-48.8	0.33
25	-10.3	-49.4	0.41
20	-18.7	-49.3	0.57
15	-33.2	-47.8	-
12	-39.0	-47.8	0.81
9	-	-48.4	1.24
8	-	-49.9	-
6	-46.3	-47.8	0.70
3	-42.6	-48.8	0.47
0	-40.2	(1+1) -	-

Pushin and Pinter, 1929

mol %	d	η
	30°	
100	1.1236	4450
90	.1184	5040
80	.1111	5380
75	.1068	5400
73	.1050	5420
70	.1025	5400
60	.0906	4940
50	.0770	4000
40	.0609	3300
30	.0422	2070
20	.0190	1480
10	0.9955	1090
0	.9757	826

Pushin and Matavulj, 1933

mol %	n_D	mol %	n_D
	30°		
0	1.5045	54.9	1.5396
10	.5125	57.4	.5403
20	.5205	59.8	.5408
30	.5282	70	.5419
40	.5335	80	.5421
44.7	.5359	90	.5413
50	.5380	100	.5397
52.4	.5389		

Pyridine (C_5H_5N) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol %	f.t.	mol %	f.t.
100	51	66.7	6
90	44	20	-52
80	34	10	-44
70	15	0	-40

Pushin and Matavulj, 1933

mol %	n_D	n_D
	20°	60°
0	1.5100	1.4876
10	-	.4930
15.5	.5167	.4957
20.2	-	.4976
30.3	.5216	.5020
40.0	.5241	.5053
44.9	.5251	.5066
49.7	.5260	.5077
54.9	.5265	.5083
59.8	.5269	.5086
65.2	.5269	.5088
70.4	-	.5086
82.3	-	.5076
84.0	.5251	.5072
89.5	-	.5064
100.0	.5229	.5048

Pyridine (C_5H_5N) + o-Phenylphenol ($C_{12}H_{10}O$)

Hazlet and Morrow, 1942

mol %	f.t.	E
0.00	-41.7	-
3.21	-43.3	-
5.17	-	-44.7
8.10	-43.1	-44.4
10.52	-33.1	-44.8
13.05	-23.0	-
14.54	-17.8	-
19.81	-1.4	-
24.86	+ 8.8	-
29.52	17.0	-
35.10	25.8	-
39.65	31.5	-
43.11	34.5	-
49.39	38.2	-
54.88	36.0	-
61.39	28.2	-
66.26	19.1	-
67.22	9.8	14.4
70.13	-	14.3
73.88	22.4	-
78.11	30.4	-
80.34	33.9	-
88.53	45.9	-
91.24	49.4	-
94.41	52.5	-
100.00	57.1 (1+1)	-

Pyridine (C_5H_5N) + p-Phenylphenol ($C_{12}H_{10}O$)

Hazlet and Morrow, 1942

mol %	f.t.	mol %	f.t.
0.00	-41.7	44.00	38.7
6.34	-45.5	46.03	45.6
8.40	-46.8	48.12	53.0
11.42	-49.3 E	49.83	59.7
15.20	-41.3	51.13	61.0
19.98	-28.4	51.64	62.1
25.14	-15.2	53.80	77.4
28.13	- 3.3	55.31	87.1
29.28	- 1.1	65.09	124.2
30.86	2.5	66.64	127.0
33.76	6.0	69.84	133.0
(33.97)	(-10.5)	73.12	138.5
36.13	9.8	74.86	141.4
(36.57)	(6.0)	80.46	148.4
37.15	10.4	87.77	155.5
38.15	15.2	90.06	157.6
40.05	23.6	100.00	165.1

(1+1)

(1+2)

Pyridine (C₅H₅N) + m-Phenylphenol (C₁₂H₉O))

Hazlet and Morrow, 1942

mol %	f. t.	mol %	f. t.
0.00	-41.7	49.75	34.3
2.87	-43.0	54.87	33.3
7.21	-44.3 E	59.86	26.0
9.76	-36.3	64.61	15.7
12.54	-25.3	68.68	8.8
15.92	-10.9	68.68	12.6 E
18.71	- 0.9	68.98	21.5
24.97	10.4	74.92	36.5
27.67	15.2	85.36	57.9
31.62	22.2	89.87	64.0
35.75	27.2	95.72	71.1
41.19	31.9 (1+1)	100.00	75.3

Pyridine (C₅H₅N) + o-Chlorphenol (C₆H₅OC1)

Bramley, 1916

%	mol %	f. t.
0	0	-40.7
8.22	5.22	-44.5
16.53	10.87	-49.8
23.98	16.32	-55.4
31.56	22.2	-61.4
39.04	28.3	-48.1
43.68	32.3	-40.0
49.50	37.65	-31.5
53.62	41.5	-26.45
58.33	46.3	-22.5
62.34	50.5	-21.7
64.31	52.6	-22.6
66.56	54.0	-23.3
69.55	58.5	-62.0 and -27.8
76.83	67.1	-38.5 and -34.5
85.49	78.4	-12.3
90.05	84.8	- 4.1
93.93	90.5	+ 2.2
97.01	95.2	5.9
100	100	8.0
E : 23.1 mol % -63.0		
66.1 " " -36.9		
(1+1) -21.6		

Pushin and Rikovski, 1949

mol %	f. t.	mol %	f. t.
0	-42	50	-18.5
10	-48	53	-22.5
20	-58.5	57	-25.5
30	-41.5	60	-30
40	-25	80	-11.5
45	-20.5	90	+ 2
47	-19.5	100 (1+1)	7

Bramley, 1916

%	0°	10°	20°	30°
0.00	1.0013	0.9916	0.9819	0.9723
11.17	.0288	1.0190	1.0093	.9995
21.62	.0555	.0459	.0364	1.0267
31.57	.0821	.0726	.0631	.0536
42.31	.1123	.1030	.0937	.0843
51.48	.1402	.1308	.1213	.1120
60.15	.1674	.1580	.1486	.1392
67.47	.1894	.1798	.1701	.1605
72.50	.2040	.1941	.1843	.1743
76.93	.2162	.2062	.1963	.1860
81.06	.2272	.2171	.2066	.1961
85.17	.2384	.2278	.2177	.2069
92.51	.2562	.2453	.2344	.2236
100.00	.2741	.2626	.2512	.2399

%	40°	60°	80°	110°
0.00	0.9627	0.9424	0.9218	0.8900
11.17	.9896	.9696	.9498	.9198
21.62	1.0171	.9976	.9783	.9492
31.57	.0441	1.0250	1.0058	.9770
42.31	.0750	.0561	.0373	1.0080
51.48	.1027	.0839	.0651	.0357
60.15	.1297	.1110	.0921	.0622
67.47	.1509	.1318	.1124	.0822
72.50	.1645	.1447	.1247	.0942
76.93	.1759	.1559	.1358	.1048
81.06	.1857	.1654	.1450	.1139
85.17	.1958	.1753	.1548	.1232
92.51	.2128	.1915	.1703	.1376
100.00	.2284	.2060	.1834	.1490

%	0°	10°	20°	30°
0.00	1323	1108	941	821
11.17	1661	1382	1158	994
21.62	2175	1765	1459	1249
31.57	2985	2350	1903	1588
42.31	4450	3360	2620	2152
51.48	7100	5080	3690	2960
60.15	11980	7770	5280	3920
67.47	18280	10760	6820	4720
72.51	22850	12750	7800	5220
76.93	26300	13850	8230	5400
81.06	26950	14020	8160	5360
85.17	25060	13260	7580	5040
92.51	18100	10040	5970	4110
100.00	10790	6390	4210	3080

%	40°	60°	80°	110°
0.00	714	578	487	385
11.17	863	686	568	448
21.62	1073	830	672	516
31.57	1351	1015	802	600
42.31	1773	1291	986	704
51.48	2310	1592	1185	798
60.15	2980	1935	1370	885
67.47	3530	2181	1487	945
72.51	3780	2285	1529	964
76.93	3840	2290	1532	962
81.06	3780	2230	1495	942
85.17	3550	2108	1425	906
92.51	2940	1840	1257	837
100.00	2320	1513	1070	760

Pushin and Matavulj, 1933

mol %	n_D	
	25°	50°
0	1.5071	1.4932
10	.5178	-
20	.5277	-
30	.5370	-
35	.5416	-
40	.5456	-
44.8	.5497	1.5372
47.1	.5511	.5388
50.0	.5531	.5405
53.1	.5547	.5420
55	-	.5427
56.8	.5561	.5433
60	.5570	-
65	.5584	-
70	.5593	-
80	.5595	-
90	.5588	-
100	.5573	1.5438

Bramley, 1916

%	U	%	U
0-20°			
0.00	0.395	55.3	0.385
8.23	.390	62.45	.393
16.75	.383	67.75	.397
19.11	.383	76.0	.404
28.70	.379	83.0	.408
31.25	.377	88.5	.409
38.50	.375	91.6	.407
42.00	.376	96.5	.407
49.3	.379	100	.401

0-100°

0.00	0.411	58.5	0.421
10.63	.409	69.8	.424
22.50	.408	79.9	.420
35.15	.409	91.6	.409
46.4	.413	100	.396

%	Q mix	%	Q mix
39.0	1516	66.0	2131
44.9	1739	70.0	2034
53.1	2024	74.9	1864
58.9	2155	78.0	1719
61.9	2178	85.0	1511

Pyridine (C_5H_5N) + p-Chlorphenol (C_6H_4OCl)

Burnham and Madgin, 1936 (fig.)

mol %	f. t.	mol %	f. t.
0	42.9	60	-11 (1+1)
10	29	70	-23
20	12.5	80	-36.5
30	-10	87	-47.5 E
33	-17.8 E	90	-45
40	-11.5	100	-40.5
50	- 3.7		

Pushin and Matavulj, 1933

mol %	n_D	
	20°	40°
0	1.5100	1.4989
10.8	.5200	.5093
20	.5282	.5180
30	.5368	.5270
40	.5447	.5353
45	.5482	.5390
49.7	.5512	.5422
54.4	.5540	.5451
58.7	.5563	.5475
64.6	.5591	.5502
69.5	.5680	.5520
79.6	.5641	.5550
89.3	.5666	.5574
100.0	.5690	.5600

Pyridine (C_5H_5N) + o-Aminophenol (C_6H_7ON)

Hrynakowski and Ellert, 1939

%	f. t.	E
0	-40.2	-
10	-45	-50
15	-48	-50
20	-34.3	-49.5
30	+28	-49
40	+76.5	-51.5
50	+106.5	-49.5
60	+129	-
70	+148	-
100	+174	-

Pyridine (C_5H_5N) + m-Aminophenol (C_6H_7ON)

Hrynakowski and Ellert, 1939

%	f. t.	E
0	-40.2	-
10	-44	-54
20	-50	-
25	-30.5	-50
30	-13	-49.6
35	- 8.5	-
40	- 9	-13.2
45	-11.5	-13.5
50	+ 35	-15
60	+ 65.8	-15.2
70	+ 88.5	-
80	+102.5	-
100	+122.5 (2+1)	-

Pyridine (C_5H_5N) + o-Nitrophenol ($C_6H_5O_2N$)

Dionisiev and Kirilova, 1952 (fig.)

mol %	f. t.	mol %	f. t.
100	44.5	35	-42
78	33	20	-76
60	12	10	-55
40	-25	0	-38

Bramley, 1916

%	d			
	30°	40°	60°	80°
0.00	0.9723	0.9627	0.9424	0.9218
11.32	1.0047	.9947	.9740	.9536
20.74	.0331	1.0231	1.0022	.9816
27.58	.0544	.0442	.0232	1.0025
39.62	.0935	.0831	.0617	.0407
52.25	.1362	.1257	.1037	.0824
60.24	.1645	.1537	.1317	.1103
68.32	.1929	.1821	.1599	.1383
76.79	.2233	.2125	.1903	.1686
86.96	.2578	.2472	.2250	.2035
91.25	.2730	.2622	.2400	.2185
100.00	.3045	.2942	.2712	.2482

Dionisiev and Kirilova, 1952 (fig.)

mol %	25°	35°	d	45°	55°
100	-	-		1.28	1.27
90	-	1.28		1.27	1.25
70	1.24	1.23		1.22	1.21
60	1.22	1.20		1.19	1.17
40	1.15	1.14		1.13	1.12
20	1.08	1.07		1.05	1.04
0	0.98	0.97		0.96	0.94

Bramley, 1916

%	30°	40°	η	60.1°	80°
0.00	821	714		578	487
11.32	943	815		647	519
20.74	1081	930		719	590
27.58	1211	1030		786	635
39.62	1500	1245		925	724
52.25	1881	1510		1092	836
60.24	2150	1711		1212	911
68.32	2450	1912		1325	992
76.79	2755	2145		1460	1080
86.96	3145	2411		1621	1195
91.25	3331	2525		1688	1240
100.00	3650	2755		1825	1348

Dionisiev and Kirilova, 1952 (fig.)

mol %	25°	35°	η	45°	55°
100	-	-		2000	1650
89	-	2350		1900	1630
80	-	2200		1800	1550
70	2650	2050		1750	1500
60	2400	1850		1600	1400
40	1750	1450		1250	1100
30	1450	1250		1100	950
20	1200	1050		950	850
0	850	800		750	700

mol %	25°	κ	45°	55°
100	-	0		0
80	-	0.010		0.011
70	0.016	0.017		0.019
60	0.026	0.028		0.030
50	0.035	0.040		0.042
40	0.041	0.045		0.047
30	0.038	0.038		0.038
20	0.032	0.028		0.027

Timofeev, 1905

initial	% final	Q dil (by mole phenol)
0	1.85	-2.41
1.85	4.77	-2.46
19.55	20.7	-2.71
38.3	39.2	-3.07

Pyridine (C_5H_5N) + p-Nitrophenol ($C_6H_5O_3N$)

Dionisieiev and Kirilova, 1952 (fig.)

mol %	f.t.	mol %	f.t.
0	113	50	61.5 (1+1)
20	78	60	57
30	62 E	80	24
33.3	66 (2+1)	100	-39
43	58 E		

mol %	d				
	60°	67°	87°	113°	123°
100	-	-	-	1.29	1.26
80	-	-	1.26	1.23	1.20
59	1.26	1.24	1.23	1.20	1.19
40	1.13	1.12	1.11	1.09	-
20	1.06	1.05	1.03	1.00	-
0	0.95	0.94	0.93	0.91	-

mol %	η				
	60°	67°	87°	113°	123°
100	-	-	-	3000	2300
90	-	-	-	3400	2400
80	-	-	6000	3000	2300
70	-	8800	4400	2400	2000
60	7400	5600	3300	2000	1600
50	4200	3300	2300	1400	1300
40	2400	2000	1400	1100	-
20	1000	900	800	700	-
0	500	500	400	400	-

mol %	κ			
	87°	113°	123°	
100	-	0	0	
90	-	26	28	
80	21	31	40	
75	23	32	38	
60	17	22	23	
40	8	11	12	
20	2	3	4	

Pyridine (C_5H_5N) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Dionisieiev and Kirilova, 1952 (fig.)

mol %	f.t.	mol %	f.t.
100	111.3	50	80 (1+1)
80	95	40	78
70	86 E	20	48
66.5	86.5 (2+1)	0	-39
57	79 E		

mol %	d		
	100°	115°	125°
100	-	1.44	1.42
80	1.42	1.40	1.38
60	1.37	1.34	1.32
40	1.26	1.24	1.22
30	1.20	1.16	1.14
20	1.10	-	-
0	0.96	-	-

mol %	η		
	100°	115°	125°
100	-	3100	2550
77	7000	4550	3500
73	7300	4750	3600
65	7700	4850	3500
63	7800	4700	3450
50	4500	3000	2400
40	2900	2150	1800
20	1100	980	960
0	100	100	100

mol %	κ		
	100°	115°	125°
100	-	-	-
80	20	26	32
60	45	58	64
40	72	80	90
30	83	90	96
25	87	91	94
20	82	89	-
10	54	-	-
0	-	-	-

Pyridine (C_5H_5N) + α -Naphthol ($C_{10}H_8O$)

Parant, 1950

mol %	f. t.	mol %	f. t.
0	-40	80	+70
10	-46	90	+83
15	-55	100	+90
70	+54		

Pyridine (C_5H_5N) + β -Naphthol ($C_{10}H_8O$)

Parant, 1950

mol %	f. t.	mol %	f. t.
0	-40	55	-20
3	-43	60	+46
5	-44	70	+80
10	-50	80	+103
15	-55	100	+120

2-Picoline (C_6H_7N) + o-Chlorphenol (C_6H_5OCl)

Lemmerman, Davidson and Wanderwerf, 1946

mol %	f. t.	mol %	f. t.
100	8.0	45.5	-13.6 (1+1)
94	4.7	42.9	-16.0 "
90	2.5	41	-17.9 "
85.9	-2.8	38.5	-21.2 "
83.8	-6.4	36.9	-23.8 "
80	-12.0	34.1	-28.0 "
77.8	-18.4	31.9	-31.7 "
75.6	-23.9	29.2	-37.1 "
73.3	-31.7	26.3	-41.2 "
63.3	-30.0 (1+1)	23	-48.1 "
59.9	-23.9 "	21.1	-51.8 "
57.8	-19.2 "	17.5	-60.0 "
55.8	-15.9 "	14.7	-66.4 "
54	-13.6 "	10.9	-75.6 "
52.2	-11.8 "	8.6	-81.5 "
"	(-6.0) "	7.8	-78.8 "
51.1	-11.1 "	6.6	-76.0 "
"	(-5.5) "	5.1	-73.6 "
50.0	-11.0 "	3.7	-69.4 "
"	(-5.3) "	2	-66.4 "
48	-11.4 "	0	-64.2 "

2-Picoline (C_6H_7N) + Picric Acid ($C_6H_3O_7N_3$)

Pushin and Kozuhar, 1947

mol %	f. t.	E
100	122	-
95	118	-
90	114	91
80	102	98
77	99	99
75	107	98
65	131	92
55	156	-
50	161	-
40	149	-
30	128	-
20	105	-
10	85	-
5	70 (1+1)	-

3-Picoline (C_6H_7N) + Phenol (C_6H_6O)

Othmer and Savitt, 1948

mol %	f. t.	mol %	f. t.
100	41.0	85.39	16.00
94.95	33.2	80.34	5.00
89.68	25.5	77.68	0.5

Azeotrope

mol %	p	b. t.
74.8	760	187.0
73.3	600	178.0
71.5	400	167.0
68.5	200	146.0

Lecat, 1949

%	b. t.
0	143.5
70	188 Az
100	182.2

Othmer and Savitt, 1948

L	mol %	V	b. t.
760mm			
0	0		143.0
12.5	0.5		145.5
43.0	7.0		165.0
51.7	16.0		174.8
53.2	21.2		176.8
56.5	29.7		180.6
62.5	42.5		183.8
67.8	54.8		185.5
72.0	66.0		186.3
76.3	79.0		186.0
82.5	89.0		184.5
91	95.0		183.1
100	100		181.5

600 mm			
0	0		135.3
24.8	1.5		141.0
43.5	5.0		156.1
44.3	5.5		157.5
50.0	10.5		163.8
52.7	15.3		167.5
55.2	22.0		170.7
65.5	51.8		176.9
72.0	70.0		178.0
76.5	82.7		177.8
82.5	91.7		175.4
100	100		170.5

400 mm			
0	0		121.0
21.0	0.5		124.0
27.8	1.0		128.9
48.5	8.5		151.3
59.0	34.4		161.5
67.0	57.8		166.1
74.0	79.0		166.4
76.0	81.2		165.0
83.5	95.5		161.3
90.0	97.7		159.2
100	100		157.3

200 mm			
0	0		99.9
29.5	1.0		110.0
47.5	7.0		126.5
55.0	24.5		139.7
61.5	43.7		143.8
62.5	45.0		144.1
65.5	57.0		145.1
71.5	79.0		146.3
72.0	79.4		145.0
73.5	85.5		145.2
77.0	91.7		143.5
100	100		137.1

3-Picoline (C_6H_7N) + o-Chlorphenol (C_6H_5OCl)

Lemmerman, Davidson and Vanderwerf, 1946

mol %	f. t.	mol %	f. t.
100	8.0	57.3	- 2.0 (1+2)
96.2	6.8	55.2	- 5.5 "
93.2	4.5	53.5	-10.0 "
90.1	1.5	52.3	-13.7 "
88.2	- 0.5	51	-18.8 "
85.5	- 4.0	50.1	-25.0 "
82.9	- 7.5	49	-29.5 "
80	-12.0	50	-18.0 (1+1)
78.2	-13.2	49	-18.2 "
78.8	- 7.0 (1+2)	46.6	-18.8 "
77.4	- 3.5 "	43.3	-21.2 "
75.9	- 0.7 "	40.8	-24.6 "
74	+ 2.5 "	38.7	-27.8 "
71.9	5.4 "	36.5	-31.5 "
69.1	7.6 "	34	-36.0 "
67.2	7.9 "	32	-39.9 "
63.9	6.5 "	31.5	-41.4 "
61.1	4.0 "	30.5	-45.0 "
59.1	1.5 "	30	-48.1 "

4-Picoline (C_6H_7N) + o-Chlorphenol (C_6H_5OCl)

Lemmerman, Davidson and Vanderwerf, 1946

mol %	f. t.	mol %	f. t.
100	8.0	45.5	23.6 (1+1)
95.4	6.0	43	22.0 "
90	2.2	40.1	19.0 "
85.6	- 1.2	37	14.4 "
84.1	- 4.0	34.2	10.1 "
82.3	- 6.3	32	7.0 "
66.6	- 3.5 (1+1)	29.2	2.1 "
65.1	1.4	26.8	- 2.0 "
63.3	6.0 "	23.2	- 8.1 "
61.5	10.5 "	21.3	-12.2 "
60	14.0 "	20	-14.8 "
58.1	18.1 "	17.5	-12.0 "
56.4	21.0 "	14	- 7.9 "
54.4	23.4 "	10	- 4.5 "
52.5	24.6 "	6.3	- 2.0 "
50	25.5 "	2.6	0
48	24.6 "	0	+ 1.6

4-Picoline (C_6H_7N) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	143.1
70	188 Az
100	182.2

Othmer and Savitt, 1948

Az	mol %	p	b. t.
	68.5	760	190.5
	67.5	600	181.7
	66.5	400	168.5
	65.0	200	147.5

L	mol %	V	b. t.
760 mm			
0	0		144.8
9.0	0.5		146.1
16.5	1.5		148.8
25.0	2.0		152.5
33	3.0		159.0
47	12.5		174.4
50.8	19.3		179.2
57.3	32.0		185.1
62.5	48.0		188.8
67.0	64.3		190.3
72.0	82.0		189.5
80.5	92.5		186.5
100	100		181.5
600 mm			
0	0		136.0
6.5	0.3		138.0
13.5	0.5		139.3
24.0	1.0		143.2
34.3	3.5		152.5
42.8	8.3		161.6
50.0	16.5		170.2
57.8	33.0		176.7
62.0	47.5		180.1
67.0	65.5		181.6
70.5	78.0		180.9
76.0	90.0		177.5
100	100		170.5
400 mm			
0	0		122.6
10.3	0.3		124.1
18.5	0.5		128.0
44.0	8.3		148.3
53.0	21.8		158.7
53.5	23.2		159.5
58.7	38.0		164.0
61.0	46.0		168.5
66.0	64.5		168.4
68.5	74.0		167.8
73.0	87.5		165.0
100	100		157.3
200 mm			
0	0		101.5
7.0	0.3		103.1
15.0	0.5		105.0
24.0	1.0		107.7
33.5	2.0		114.5
42.3	6.0		123.5
50.0	14.8		134.8
56.5	30.0		142.0
60.5	46.5		145.6
64.0	60.8		147.2
69.0	80.5		146.5
72.5	92.5		142.5
100	100		137.1

2,6-Lutidine (C_7H_9N) + Phenol (C_6H_6O)

Othmer and Savitt, 1948

L	mol %	V	b. t.
760 mm			
0	0		143.3
13.0	0.5		145.0
24.2	1.5		150.0
33.5	4.0		155.5
45.0	13.0		167.9
48.0	20.7		174.8
54.0	31.5		177.9
60.5	44.0		181.7
62.5	66.5		185.8
80.0	83.7		185.0
81.5	86.3		184.5
100	100		181.5
600 mm			
0	0		134.5
16.7	1.0		139.5
28.2	1.5		143.6
37.5	5.0		151.3
43.0	9.0		158.1
47.0	15.0		164.0
53.5	30.5		172.5
56.5	36.5		174.3
62.5	49.7		177.3
70.5	66.5		178.5
73.5	71.5		178.7
81.5	88.4		176.8
87.5	95.0		174.0
100	100		170.5
400 mm			
0	0		121.0
13.0	0.5		124.5
33.0	3.0		131.2
39.0	6.0		137.5
46.8	14.8		147.0
52.0	26.8		154.9
59.0	43.0		160.4
65.0	58.0		162.9
71.0	72.0		163.8
72.5	77.0		163.6
83.0	83.3		161.5
100	100		157.3
200 mm			
0	0		100.8
19.0	0.5		106.7
30.0	1.5		111.0
36.0	4.0		117.5
45.0	10.0		127.6
52.0	26.8		135.9
58.5	44.0		141.3
62.5	56.6		142.7
68.0	70.3		143.3
70.0	77.0		143.2
73.8	86.0		142.5
84.5	97.5		138.5
100	100		137.1

Azeotrope			
	mol %	p	b. t.
Az	76.5	760	186.0
	73.5	600	179.0
	69.5	400	164.5
	67.5	200	143.5
mol %		f. t.	mol %
100		41.0	79.59
92.15		33.0	72.90
85.72		18.0	- 6.0
			-42.0
Lecat, 1949			
%		b. t.	
0		143	
70		188 Az	
100		182.2	
2,6-Lutidine (C ₇ H ₉ N) + Picric Acid (C ₆ H ₃ O ₇ N ₃)			
Pushin and Kozuhar, 1947			
mol %		f. t.	mol %
100		122	60
95		118	50
90		113.5	40
80		102	30
77		98	20
73		93	10
70		93	0
			45 (1+1)
2,4-Lutidine (C ₇ H ₉ N) + 2,3,5-Trimethylphenol (C ₉ H ₁₂ O)			
Parant, 1950			
mol %		f. t.	mol %
15		-33	60
20		-18	70
30		0	80
40		+ 8	90
50		+11	100
56		+ 8 E	+93
			(1 + 1)
Az : 99.4 %		110.98°/10 mm	
100 %		110.9°/ 10 mm	

2,4,5-Collidine (C ₈ H ₁₁ N) + 3-Methyl-5-ethylphenol (C ₉ H ₁₂ O)			
Parant, 1950 (fig.)			
%		b. t./10 mm	
100		113.70	
93		114.05	
90		114.00	
80		113.0	
70		109.8	
60		102.4	
2,4,6-Collidine (C ₈ H ₁₁ N) + o-Cresol (C ₇ H ₈ O)			
Kurtyka, 1956			
Az : 63.0 %		(61.80 mol %) 197.20°	
2,4,6-Collidine (C ₈ H ₁₁ N) + 3-Methyl-5-ethylphenol (C ₉ H ₁₂ O)			
Parant, 1950			
mol %		f. t.	mol %
0		-50	50
5		-55	55
9		-56 E	70
10		-50	80
20		-20	90
30		- 2	100
40		+ 4	(1+1)

Quinoline (C_9H_7N) + Phenol (C_6H_6O)

Bramley, 1916

%	mol %	f. t.
0	0	-19.35
5.26	7.06	-26.2 and -15.8
11.97	15.70	+ 2.5
17.61	22.65	12.0
22.29	28.20	18.0
26.44	33.00	20.9
30.73	37.80	22.4
34.93	42.35	21.6
40.34	48.20	18.45
44.10	51.70	13.55
46.80	54.65	7.5
48.55	56.35	-14.4 and +1.0
51.42	59.20	-13.65 and +2.5
53.01	60.75	+ 4.8
57.22	64.65	7.0
61.34	68.50	7.2
65.31	72.00	5.8
69.37	75.65	-10.8 and +2.4
73.11	78.75	+ 4.55
78.11	83.00	17.50
83.75	87.65	26.25
89.15	91.90	32.70
94.79	96.20	37.30
100	100	41.00
E : 5.0 mol %		-24.1°
57.5 "		- 4.6°
77.6 " "		- 0.7°
(2+1)		(2+3)

%	9.8°	20.1°	125°	175°
0.00	1.1004	1.0925	1.0085	0.9673
7.54	.1021	.0944	.0103	.9687
14.56	.1037	.0960	.0119	.9698
22.13	.1056	.0977	.0133	.9707
29.76	.1071	.0992	.0140	.9705
37.52	.1078	.0999	.0139	.9696
45.08	.1074	.0994	.0127	.9678
53.20	.1057	.0977	.0099	.9643
60.30	.1030	.0950	.0065	.9602
68.21	.0994	.0914	.0021	.9550
76.88	.0950	.0869	0.9969	.9492
83.37	.0916	.0835	.9927	.9445
92.06	.0875	.0791	.9876	.9389
100.00	.0836	.0750	.9828	.9337

%	29.9°	40°	60°	80°
0.00	1.0851	1.0773	1.0615	1.0458
7.77	.0870	.0792	.0635	.0478
14.92	.0886	.0808	.0651	.0494
21.96	.0904	.0823	.0666	.0509
29.82	.0917	.0838	.0679	.0518
37.14	.0924	.0843	.0682	.0521
44.62	.0917	.0837	.0675	.0519
52.31	.0901	.0820	.0658	.0496
59.89	.0874	.0793	.0629	.0465
67.92	.0837	.0755	.0590	.0425
75.75	.0795	.0713	.0548	.0382
83.49	.0756	.0672	.0503	.0335
91.79	.0711	.0628	.0458	.0288
100.00	.0668	.0584	.0414	.0242

%	9.8°	20.1°	125°	175°
0.00	4805	3635	786	547
7.54	6190	4595	837	564
14.56	8100	5725	901	588
22.13	11700	7850	988	622
29.76	16770	10580	1064	642
37.52	26440	15030	1121	650
45.08	37500	20310	1155	652
53.20	50650	24520	1158	649
60.30	52590	25290	1119	632
68.21	47400	23270	1055	606
76.88	38360	19410	969	570
83.37	31560	16600	918	542
92.06	24200	13370	837	513
100.00	20100	11040	770	492

%	29.9°	40°	60°	80°
0.00	2943	2384	1671	1250
7.77	3645	2885	1950	1424
14.92	4495	3455	2245	1603
21.96	5605	4195	2615	1809
29.82	7425	5335	3120	2071
37.14	9650	6600	3645	2308
44.62	12210	7950	4100	2520
52.31	14360	8870	4360	2610
59.89	14800	9040	4400	2582
67.92	13440	8390	4100	2415
75.75	11770	7480	3710	2232
83.49	10100	6560	3315	2028
91.79	8440	5525	2875	1786
100.00	7090	4760	2520	1580

Pushin, Matavulj and Rikovski, 1948

mol %	10°	25°	45°	60°
0	1.6317	1.6245	1.6149	1.6077
10	.6271	.6203	.6109	.6039
20	.6230	.6165	.6075	.6004
29.5	.6190	.6127	.6037	.5967
40	.6144	.6083	.5991	.5922
45	.6118	.6056	.5965	.5895
47.5	.6106	.6043	.5950	.5879
50	.6092	.6029	.5936	.5866
53	.6074	.6011	.5918	.5848
55	.6058	.5997	.5905	.5834
57	.6040	.5980	.5888	.5817
60	.6019	.5960	.5864	.5797
64.5	.5973	.5912	.5818	.5749
70	.5917	.5858	.5766	.5697
80	.5803	.5748	.5656	.5587
89.5	-	-	.5536	.5468
100	1.5558	1.5492	.5402	.5332

Quinoline (C_9H_7N) + o-Cresol (C_7H_8O)

Pushin and Sladovic, 1928

mol%	f. t.	E
100	30.3	18.6
90	24.4	18.7
85	20.7	18.5
80	26.6	-
70	34	-
66.7	34.5	-
63	33.7	-
60	32	27.2
57.5	30.5	-
55	26.4	-
55	31.7	-
52.5	33.4	-
50	17	-
50	34.2	-
45	7	-
40	3.5	-
40	29	-
35	23	-
30	- 1.2	-30.7
30	+14	-27.4
25	+ 5	-
20	- 4	-27.7
15	-15.5	-
10	-22.8	-
5	-19	-
0	-15	- (1+2)

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	
	10°	60°
0	1.6310	1.6070
10	.6250	.6020
20.5	.6194	.5970
30.5	.6141	.5920
40	.6090	.5868
45	.6058	.5836
47.5	.6043	.5818
50	.6026	.5800
53	.6006	.5778
55	.5988	.5761
57.5	.5968	.5742
60	.5945	.5718
62.5	.5922	.5697
65	.5895	.5670
70	.5842	.5616
80	.5738	.5502
90	.5620	.5384
100	.5511	.5267

Quinoline (C_9H_7N) + m-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	
	10°	60°
0	1.6317	1.6077
10	.6249	.6021
20.5	.6181	.5962
30.5	.6119	.5903

40	.6057	.5842
45	.6025	.5807
47.5	.6007	.5790
50	.5989	.5773
52.5	.5971	.5753
54.5	.5957	.5736
57.5	.5933	.5714
60	.5909	.5692
62	.5887	.5671
65	.5859	.5644
70	.5805	.5589
80	.5693	.5482
89.5	.5578	.5366
100	.5452	.5240

Quinoline (C_9H_7N) + p-Cresol (C_7H_8O)

Pushin and Sladovic, 1928

mol %	f. t.	E
100	34.4	-
90	25.0	6.7
80	16	-
75	21.2	4
70	24.4	-
66.7	24.5	-
63	24.2	-
61.5	23.2	-
60	26	-
55	31	-
50	31.8	-
40	26	-
30	14	-25.6
25	6.3	-27.2
20	- 3.3	-24.8
15	-12.3	-25.4
10	-23	-26
5	-19	-
0	-15 (1+2)	-

Pushin, Matavulj and Rikovski, 1948

mol %	n_D	
	10°	60°
0	1.6310	1.6070
15	.6218	.5987
30.5	.6127	.5901
40	.6068	.5844
45	.6033	.5812
50	.5993	.5774
52.5	.5975	.5757
55	.5953	.5735
57.5	.5933	.5715
59.5	.5909	.5693
64	.5865	.5651
68.5	.5821	.5607
70	.5804	.5592
79	.5695	.5358
90	.5569	.5358
100	.5445	.5234

Quinoline (C_9H_7N) (b.t. = 237.3) + Phenols

Lecat, 1949

2nd Comp.			Az		
Name	Formula	b.t.	%	b.t.	Sat.t.
o-Xylenol as.	$C_8H_{10}O$	226.8	35	241.95	-
m-Xylenol	$C_8H_{10}O$	210.5	8	239.0	-
p-Ethylphenol	$C_8H_{10}O$	218.8	11	239.5	-
Thymol	$C_{10}H_{14}O$	232.9	45	243.0	3
Carvacrol	$C_{10}H_{14}O$	237.85	52	244.3	-
p-Amylphenol tert.	$C_{11}H_{16}O$	266.5	94	267.5	-
Mesitol	$C_9H_{12}O$	220.5	15	240.4	-
Pyrocatechol	$C_6H_6O_2$	245.9	61	257.9	58

Quinoline (C_9H_7N) + Thymol ($C_{10}H_{14}O$)

Pushin, Matavulj and Rikovski, 1948

mol %	20°	n_D	60°
0	1.6262		1.6070
10.5	.6150		.5960
20	.6050		.5862
30.5	.5948		.5768
40.5	.5857		.5676
50	.5765		.5585
55	.5715		.5532
60	.5660		.5479
70.5	.5552		.5370
80	.5438		.5258
90	.5331		.5151
100	.5222		.5041

Quinoline (C_9H_7N) + 2,3-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f.t.	mol %	f.t.
0	-18	64	31 E
6	-20 E	70	45
20	+11	80	60
30	27.5	90	67
40	37	100	71.5
50	40 (1+1)		

Quinoline (C_9H_7N) + 2,5-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f.t.	mol %	f.t.
0	-18	60	26
10	-30	70	42
30	-8	80	60
40	+6	90	68
50	+10	100	75
(1+1)			

Quinoline (C_9H_7N) + 3,5-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f.t.	mol %	f.t.
0	-18	70	+30
5	-20	80	+45
10	-23	90	+58
15	-27	100	+63
67	+16		

Quinoline (C_9H_7N) + 3,4-Xylenol ($C_8H_{10}O$)

Parant, 1950 (fig.)

mol %	f.t.	mol %	f.t.
0	-18	55	24 E
10	-20 E	66	41 (1+2)
20	+2	71	38 E
30	+17	80	49
40	24	90	58
50	27 (1+1)	100	64

Quinoline (C_9H_7N) + Guaiacol ($C_7H_8O_2$)

Pushin and Rikovski, 1937

mol %	f.t.	mol %	f.t.
0	-19	60	9
10	-25	68	-0.5
20	-19	70	+1
30	-2	80	12
40	+9	90	21
50	+12 (1+1)	100	28

Pushin and Pinter, 1919

mol %	d	η
	30°	
0	1.1236	4450
10	1.1265	5950
20	1.1264	8050
30	1.1255	10040
33.3	-	10540
36	-	10970
38	-	11450
40	1.1248	11650
44	-	11650
46	-	11570
50	1.1194	10950
60	1.1139	8980
70	1.1079	6770
80	1.0972	4870
90	1.0892	3880
100	1.0830	3100

Pushin, Matavulj and Rikovski, 1948

mol %	5°	n_D 30°	60°
0	1.6332	1.6314	1.6070
10	.6278	.6162	.6018
20	.6224	.6111	.5968
30	.6172	.6058	.5912
40	.6119	.6002	.5853
45	.6087	.5968	.5818
47.5	.6069	.5949	.5798
50	.6052	.5931	.5780
52.5	.6033	.5912	.5759
54	.6022	.5902	.5748
55	.6015	.5893	.5739
56	.6007	.5885	.5731
58	.5988	.5867	.5713
60	.5970	.5848	.5693
62	.5951	.5828	.5673
64	.5930	.5809	.5655
66.6	.5904	.5780	.5628
70	.5870	.5745	.5593
81.5	.5737	.5611	.5463
90	.5636	.5514	.5366
100	.5509	.5386	.5239

Quinoline (C_9H_7N) + 3-Methyl-5-ethylphenol
($C_9H_{12}O$)

Parant, 1950

mol %	f.t.	mol %	f.t.
0	-18	80	+35
5	-19	90	+45
10	-22	100	+50
75	+30		

Quinoline (C_9H_7N) + 2,3,5-Trimethylphenol
($C_9H_{12}O$)

Parant, 1950

mol %	f.t.	mol %	f.t.
0	-18	70	+65
5	-20	80	82
10	-22	90	88
55	+40	100	93
60	+48		

Quinoline (C_9H_7N) + o-Chlorophenol (C_6H_5OCl)

Bramley, 1916

%	mol %	f.t.
0	0	-19.5
4.45	4.46	23.0
9.58	9.62	27.6 and 26.6
13.13	13.18	-31.5 and -13.2
17.15	17.20	-36.9 and + 4.5
21.34	21.4	+15.0
25.60	25.7	22.4
30.27	30.35	31.5
36.51	36.6	39.5
42.00	42.1	44.45
48.78	48.9	47.35
55.93	56.05	44.75
63.28	63.35	36.0
69.66	69.7	+22.8
74.78	74.8	-18.9 and + 6.0
79.82	79.85	- 9.9
84.72	84.75	- 3.4
89.39	89.4	+ 6.7
93.65	93.65	4.25
97.07	97.07	6.25
100	100	8.00
E : 9.6 mol %		-27.6
79.1 " "		-10.9 (1+1)

Bramley, 1916

%	0°	10°	d	20°	30°
0.00	1.1078	1.1002	1.0926	1.0850	
16.79	.1413	.1332	.1251	.1170	
32.53	.1730	.1645	.1559	.1473	
42.39	.1927	.1839	.1750	.1662	
48.81	.2047	.1958	.1869	.1779	
50.31	.2076	.1987	.1897	.1807	
53.28	.2130	.2040	.1950	.1860	
54.94	.2158	.2068	.1977	.1885	
57.92	.2205	.2114	.2023	.1932	
63.42	.2284	.2190	.2097	.2003	
72.18	.2405	.2306	.2207	.2108	
86.66	.2585	.2476	.2365	.2255	
100.00	.2741	.2626	.2512	.2399	

Bramley, 1916.					
%	40°	60°	d 80°	110°	150°
0.00	1.0773	1.0615	1.0458	1.0213	0.9879
16.79	.1090	.0929	.0768	.0518	1.0178
32.53	.1388	.1221	.1054	.0791	.0428
42.39	.1575	.1403	.1231	.0953	.0575
48.81	.1690	.1512	.1334	.1050	.0665
50.31	.1717	.1539	.1361	.1073	.0682
53.28	.1770	.1590	.1408	.1119	.0722
54.94	.1794	.1613	.1434	.1140	.0742
57.92	.1840	.1657	.1474	.1176	.0773
63.42	.1908	.1720	.1533	.1233	.0823
72.18	.2008	.1813	.1617	.1312	.0894
86.66	.2151	.1943	.1734	.1414	.0977
100.00	.2284	.2060	.1834	.1490	.1028

%	η			
	0°	10°	20°	30°
0.00	6830	4800	3640	2940
16.79	14500	9500	6620	4870
32.53	41500	22210	13000	9110
42.39	112500	50300	23620	14400
48.81	225000	77000	33450	17920
50.31	255500	82500	35100	18400
53.28	293500	90200	36900	19000
54.94	301700	92600	37250	19010
57.92	301400	92300	36620	18880
63.42	245000	80400	31620	17420
72.18	134100	48150	21850	12820
86.66	39350	18180	9950	6410
100.00	10790	6390	4210	3080

%	40°	60°	η 80°	110°	150°
0.00	2385	1671	1250	930	666
16.79	3710	2380	1673	1129	745
32.53	6350	3595	2222	1334	815
42.39	8960	4400	2595	1462	857
48.81	10470	4840	2760	1505	869
50.31	10730	4900	2775	1505	868
53.28	10950	4940	2785	1502	865
54.94	10980	4930	2775	1494	860
57.92	10890	4880	2700	1469	850
63.42	10000	4525	2560	1411	822
72.18	7640	3695	2205	1266	759
86.66	4330	2425	1600	1007	650
100.00	2320	1513	1070	760	546

Pushin, Matavulj and Rikovski, 1948			
mol %	25°	n_D	50°
0	1.6238		1.6119
15	.6200		.6085
30	.6162		.6053
40.5	.6136		.6025
44.5	.6120		.6004
49.5	.6096		.5979
55.5	.6061		.5944
59.5	.6030		.5911
64.5	.5985		.5863
69.5	.5930		.5812
84.5	.5771		.5638
100	.5566		.5431

Bramley, 1916

%	U	%	U
0-20°			
0	0.352	53.0	0.386
9.38	351	60.5	399
12.37	350	66.1	404
19.19	351	73.95	408
31.10	362	82.55	407
42.50	373	92.3	403
48.25	380	100	401

Bramley, 1916

%	Q mix cal/g	%	Q mix cal/g
33.0	13.50	52.6	18.30
38.8	15.48	53.6	18.24
43.9	17.20	54.7	18.10
46.75	17.86	54.75	18.04
47.9	18.17	57.5	17.38
50.1	18.26	61.4	15.79
51.2	18.35	66.75	13.70
51.7	18.35		

Quinoline (C_9H_7N) + p-Chlorophenol (C_6H_4OCl)

Pushin, Matavulj and Rikovski, 1948

mol %	10°	n_D	60°
0	1.6310		1.6070
10.5	.6262		.6037
20.5	.6224		.6008
30	.6192		.5978
40	.6156		.5943
45	.6138		.5926
47	.6130		.5917
50	.6118		.5904
52.5	.6107		.5893
55	.6095		.5880
56.5	.6085		.5870
59.5	.6066		.5851
62.5	.6048		.5831
65	.6029		.5813
70	.5985		.5772
80	.5900		.5687
90	.5810		.5596
100	.5727		.5504

Quinoline (C_9H_7N) + o-Nitrophenol ($C_6H_5O_2N$)

Kirilova and Dionisiev, 1953 (fig.)

mol %	f.t.	mol %	f.t.
100	43	45	3
80	32	15	-38
60	20	0	-19

Bramley, 1916

%	30°	40°	d	60°	80°
0.00	1.0850	1.0773		1.0615	1.0458
10.80	.1072	.0989		.0823	.0657
21.43	.1312	.1224		.1050	.0879
30.69	.1520	.1430		.1249	.1069
41.61	.1760	.1667		.1479	.1291
49.16	.1940	.1844		.1651	.1458
58.20	.2142	.2045		.1846	.1649
67.04	.2341	.2242		.2038	.1856
77.56	.2553	.2456		.2246	.2038
82.41	.2659	.2561		.2348	.2138
86.76	.2750	.2651		.2435	.2220
91.18	.2846	.2746		.2525	.2306
95.54	(1.2943)	.2842		.2617	.2393
100.00	(1.3045)	.2942		.2712	.2482

Kirilova and Dionisiev, 1953 (fig.)

mol %	45°	d	55°
100	1.275		1.270
80	1.240		1.235
60	1.210		1.200
40	1.160		1.145
20	1.125		1.110
0	1.075		1.060

Bramley, 1916

%	30°	40°	η	60°	80°
0.00	2940	2385		1671	1250
10.80	3361	2660		1789	1321
21.43	3772	2928		1897	1391
30.69	4125	3160		1995	1437
41.61	4495	3375		2084	1470
49.16	4680	3465		2122	1483
58.20	4720	3470		2122	1485
67.04	4595	3410		2093	1471
77.56	4355	3250		2024	1441
82.41	4220	3151		1986	1421
86.76	4090	3059		1949	1406
91.18	3950	2955		1900	1392
95.54	3800	2855		1874	1371
100.00	3650	2755		1825	1348

Kirilova and Dionisiev, 1953 (fig.)

mol %	45°	η	55°
100	2050		1660
80	2250		1800
60	2450		2000
40	2450		1950
20	2200		1800
0	1950		1550

mol %	25°	κ	45°	55°
85	-	0.125		0.13
75	0.14	0.20		0.22
60	0.15	0.205		0.23
50	0.14	0.19		0.22
40	0.12	0.16		0.18
30	0.10	0.12		0.13
20	0.06	0.07		0.075

Quinoline (C_9H_7N) + p-Nitrophenol ($C_6H_5O_2N$)

Kirilova and Dionisiev, 1953 (fig.)

mol %	f.t.	mol %	f.t.
100	113	40	82
80	89	20	49
70	58 E	3	-20
60	86	0	-16
50	89.5 (1+1)		

mol %	95°	105°	d	115°	125°
0	1.05	1.03		1.02	1.0
20	1.10	1.08		1.07	1.05
40	1.16	1.14		1.12	1.11
50	1.18	1.17		1.16	1.15
60	1.21	1.19		1.17	1.15
80	1.25	1.24		1.22	1.20
90	1.28	1.26		1.24	1.22
100	-	-		1.28	1.24

mol %	85°	95°	η	105°	115°	125°
0	600	600		500	500	500
20	1800	1600		1400	1200	1000
40	3500	2800		2100	2000	1500
60	6500	5200		4000	3000	2100
80	9200	6500		5000	3800	3000
100	-	-		-	2900	2500

mol %	60°	70°	κ	85°	105°	125°
20	0.1	0.3		0.4	0.6	1
40	0.5	0.8		1.2	1.8	2
60	3	3.5		4	4.5	5
70	4	5		5.5	6	11
80	-	-		9	13	17
90	-	-		-	17	20

Quinoline (C_9H_7N) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kirilova and Dionisiev, 1953 (fig.)

mol %	f. t.	mol %	f. t.
100	113.3	40	89
80	94	20	70
72	81 E	3	-20
60	90	0	-18
50	92 (1+1)		

mol %	95°	d 115°	125°
0	1.01	1.0	0.99
20	1.11	1.1	1.09
40	1.25	1.24	1.23
60	1.33	1.32	1.31
70	1.38	1.37	1.36
80	-	1.38	1.37
100	-	1.44	1.40

mol %	95°	η 115°	125°
0	-	600	500
20	2000	1300	1000
40	4800	2700	2200
60	10000	4900	3000
70	9000	4500	2800
80	-	4000	2700
100	-	2990	2500

mol %	85°	κ 95°	115°	125°
20	13	14	15	16
40	15	18	24	28
60	11	14	22	27
70	9	13	17	22
90	-	-	6	8

Quinoline (C_9H_7N) + Picric Acid ($C_6H_3O_7N_3$)

Pushin and Kozuhar, 1947

mol %	f. t.	E
100	122	-
96.5	120	-
95	119	-
93	118	-
80	143	118
70	167	115
60	193	-
55	202	-
50	209	-
40	189	-
30	166	-
20	142	-
10	110	-
5	90	-
0	- 15.6 (1+1)	-

Quinoline (C_9H_7N) + α -Naphthol ($C_{10}H_8O$)

Parant, 1950

mol %	f. t.	mol %	f. t.
0	-18	50	+46
3	-20 E	60	+40
10	+10	63	+38 E
20	+24	70	+58
30	+33	80	+78
40	+40	90	+84
48	+48	100 (1+1)	+90

Kirilova and Dionisiev, 1953 (fig.)

mol %	f. t.	mol %	f. t.
100	95	28	29
80	78	20	24
65	40	4	-23
50	53.5 (1+1)	0	-19
40	46		
(2+3) or (1+2) incongruent .			

mol %	50°	d 57°	97°	107°
0	-	-	1.03	1.02
20	-	-	1.05	1.04
40	1.09	1.085	1.07	1.06
60	1.11	1.10	1.08	1.07
80	-	-	1.09	1.08
100	-	-	1.09	1.08

mol %	50°	η 57°	97°	107°
0	-	-	-	500
30	-	-	1600	1500
40	10000	7000	3000	2000
60	27000	18000	3500	3000
70	25000	17000	3000	2000
80	-	-	2500	1700
100	-	-	1700	1600

mol %	57°	κ 77°	97°	107°
10	0.004	-	0.005	0.007
20	0.005	0.009	0.011	0.013
40	0.005	0.011	0.015	0.018
50	0.004	0.010	0.017	0.020
70	0.007	-	0.019	0.023
80	-	-	0.016	0.018
90	-	-	0.011	0.010

Quinoline (C_9H_7N) + β -Naphthol ($C_{10}H_8O$)

Parant, 1950

mol %	f. t.	
	I	II
0	-17	-
2.5	-18 E	-18
3	- 8	-16
5	0	-13
10	+10	- 5
20	+15	+10
30	+38	+20
40	+48	+34
50	+53	+45.3 (1+1)
55	-	+62
60	-	+70 (2+3)
63	-	+65
70	-	+85
80	-	+105
90	-	+113
100	-	+120

Kirilova and Dionisiev, 1953 (fig.)

mol %	f. t.	mol %	f. t.
100	121	40	51
80	112 (1+2)	20	23
66	71.5	1	-22
52	68	0	-19
49	55 (1+1)		

mol %	d				
	50°	70°	105°	115°	125°
0	-	-	1.025	1.02	1.015
20	1.10	1.08	1.05	1.04	1.03
40	1.11	1.09	1.07	1.06	1.05
60	1.12	1.10	1.08	1.07	1.06
80	-	-	1.085	1.07	1.065
100	-	-	-	-	1.07

mol %	η				
	50°	70°	105°	115°	125°
0	-	-	700	600	500
20	2500	2000	1000	700	600
40	9000	5000	2000	1900	1800
45	20000	6000	2500	2300	2100
60	-	11000	3000	2400	2150
80	-	-	2900	2400	2100
100	-	-	-	-	2000

mol %	κ		
	105°	115°	125°
10	0.005	0.008	0.01
20	0.01	0.015	0.018
40	0.018	0.023	0.028
60	0.026	0.030	0.035
70	0.031	0.035	0.038
80	0.032	0.034	0.036
90	0.021	0.022	0.023

Indole (C_8H_7N) (b. t. = 253.5) + Phenols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Tert. Amyl-phenol	$C_{11}H_{16}O$	266.5	88	268.0
Carvacrol	$C_{10}H_{14}O$	237.85	12	254.5
Pyrocatechol	$C_6H_6O_2$	245.9	15	255.0
Eugenol	$C_{10}H_{12}O_2$	254.8	65	251.8

Methyl- α -indole (C_9H_9N) + Tert. Amylphenol-p ($C_{11}H_{16}O$)

Lecat, 1949

%	b. t.
0	268
44	272.0 Az
100	266.5

Quinaldine ($C_{10}H_9N$) (b. t.=246.5) + Phenols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Xylenol-o as.	$C_8H_{10}O$	226.8	20	248.0
Thymol	$C_{10}H_{14}O$	232.9	20	250.0
Carvacrol	$C_{10}H_{14}O$	237.85	33	250.8
Pyrocatechol	$C_6H_6O_2$	245.9	48	252.5

Pyridazine ($C_4H_4N_2$) (b. t.=207.2) + Phenols

Lecat, 1949

2nd Comp.			Az	
Name	Formula	b. t.	%	b. t.
Phenol	C_6H_6O	182.2	12	209.0
o-Cresol	C_7H_8O	191.1	74	194.8
m-Cresol	C_7H_8O	202.2	32	211.8
p-Cresol	C_7H_8O	201.7	30	211.5
m-Xylenol as.	$C_8H_{10}O$	210.5	75	215.5
p-Ethyl-phenol	$C_8H_{10}O$	218.8	85	220.5
Guaiacol	$C_7H_8O_2$	205.05	85	203.5

Nicotine ($C_{10}H_{14}N_2$) + Thymol ($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	247.5
21	250.2 Az
100	232.9

Nicotine ($C_{10}H_{14}N_2$) + o-Nitrophenol ($C_6H_5O_3N$)

Babak and Udovenko, 1950

mol %	d		
	35°	50°	75°
100	-	1.2851	1.2570
89.50	-	.2496	.2244
84.37	1.2515	.2304	.2040
79.81	.2306	.2142	.1858
69.80	.1986	.1811	.1542
68.11	.1915	.1747	.1477
66.55	.1892	.1733	.1450
64.94	.1806	.1645	.1383
63.38	.1797	.1629	.1370
59.23	.1631	.1467	.1203
49.95	.1329	.1170	.0914
39.70	.1038	.0875	.0628
30.12	.0747	.0609	.0368
20.12	.0482	.0336	.0108
10.63	.0230	.0103	0.9888
0	0.9986	0.9866	.9670

mol %	η		
	35°	50°	75°
100	-	2309.8	1561.2
89.50	-	2723.9	1622.1
84.37	5072.3	3073.0	1744.6
79.81	5995.5	3527.4	1877.8
69.80	7601.5	4122.4	2000.5
68.11	7831.6	4240.1	2050.7
66.55	8011.3	4344.0	2080.5
64.94	8003.6	4388.8	2090.0
63.38	7981.7	4387.9	2078.7
59.23	7889.3	4362.0	2075.5
49.95	7375.2	4120.4	2044.6
39.70	6568.5	3829.8	2004.0
30.12	5676.0	3421.3	1867.2
20.12	4611.6	2927.1	1684.3
10.63	3359.5	2523.3	1535.1
0	3155.5	2037.6	1262.6

Carbazol ($C_{12}H_9N$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.0	-
4.4	232.0	-
13.1	226.0	-
18.3	221.0	-
22.5	217.0	-
27.0	213.0	-
31.4	209.0	-
34.7	205.9	-
40.7	201.0	-
44.5	197.5	-
47.5	194.6	-
51.1	191.0	-
53.2	189.0	-
57.6	184.0	-
63.2	178.0	-
67.0	173.0	-
71.6	167.5	-
78.6	157.0	102.0
87.3	137.0	"
93.3	112.5	101.8
97.6	102.5	-
100	103.2	-

Carbazol ($C_{12}H_9N$) + Resorcinol ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.0	-
2.6	234.0	-
5.3	232.0	-
11.1	227.7	-
16.8	223.0	-
21.2	218.5	-
26.0	215.4	-
30.8	212.0	-
35.0	208.8	-
38.8	206.0	-
41.4	203.5	-
46.2	200.3	-
49.5	198.0	-
51.0	197.0	-
53.9	194.5	-
57.4	192.0	-
61.5	188.0	-
65.7	183.7	-
70.2	179.0	-
77.1	170.0	107.2
83.6	159.1	"
88.4	140.0	"
93.4	108.0	"
100	109.0	-

Carbazol ($C_{12}H_9N$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E
0	235.8	-
4.2	231.8	-
10.7	226.0	-
17.1	220.5	-
21.6	217.1	-
26.0	214.5	-
32.3	210.3	-
36.8	207.8	-
50.1	199.5	-
50.5	199.6	-
57.5	194.0	-
63.2	189.0	-
66.2	186.7	-
72.1	180.5	-
77.0	174.0	163.2
81.3	167.5	"
88.2	164.3	-
95.0	166.8	-
100	168.0	-

Carbazol ($C_{12}H_9N$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.0	-
4.5	232.5	-
11.0	228.0	-
22.7	220.9	-
28.3	217.6	-
34.4	214.1	-
39.4	212.2	-
42.7	210.8	-
45.6	208.5	-
48.2	207.9	-
51.8	204.6	-
57.4	201.5	-
62.0	197.8	-
69.9	190.0	-
75.4	185.2	-
82.5	176.2	-
87.8	164.6	125.5
94.1	141.2	"
100	126.5	-

Carbazol ($C_{12}H_9N$) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Slovak, 1920

%	f. t.	%	f. t.
0	236.0	57.1	170.8
13.4	225.5	61.9	162.2
20.3	220.0	66.0	153.8
23.6	214.8	73.4	143.1
29.1	210.3	78.9	129.2
35.5	203.8	84.3	115.6
42.5	195.5	89.7	97.4
46.7	187.1	93.6	66.5
50.6	181.0	97.6	44.0
53.6	175.9	100	44.6

Carbazol ($C_{12}H_9N$) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.1	-
6.3	231.0	-
10.5	227.5	-
17.7	221.0	-
26.4	213.2	-
35.1	205.2	-
40.8	199.6	-
47.3	192.5	-
51.6	186.8	-
56.7	180.8	-
61.0	177.0	-
67.5	168.5	-
71.8	162.2	-
75.8	153.0	-
81.7	138.8	91.8
85.8	127.0	92.0
93.3	99.0	91.8
96.7	93.0	91.4
100	95.0	-

Carbazol ($C_{12}H_9N$) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.0	-
5.4	231.9	-
10.4	227.8	-
17.0	221.8	-
19.5	218.8	-
23.5	214.4	-
27.5	211.2	-
32.6	207.0	-
37.7	202.2	-
40.5	200.2	-
41.2	199.7	-
48.0	192.5	-
51.4	188.8	-
54.7	185.4	-
58.7	181.6	-
62.4	177.0	-
67.4	170.2	-
72.7	161.0	-
77.3	151.0	-
84.1	134.8	-
88.3	123.5	106.2
90.7	114.6	106.6
93.1	107.9	106.9
96.0	108.5	-
99.0	100.5	-
99.5	111.8	-

Carbazol ($C_{12}H_9N$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.5	-
9.0	230.5	-
17.7	223.0	-
21.1	220.5	-
27.4	213.2	-
31.9	208.0	-
36.5	203.1	-
43.3	195.0	-
47.7	188.2	-
51.8	181.2	-
54.9	175.5	-
59.8	165.5	-
66.5	148.5	-
73.0	133.0	98.0
78.4	114.5	98.6
83.0	98.6	98.6
87.9	102.0	-
92.2	106.0	-
100	110.0	-

Carbazol ($C_{12}H_9N$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Slovak, 1920

%	f. t.	E
0	236.0	-
5.7	233.3	-
12.4	229.0	-
19.6	222.0	-
28.7	213.5	-
37.5	203.0	-
43.3	193.0	181.2
47.0	186.5	181.5
50.1	182.1	-
54.1	182.7	-
57.2	183.2	-
60.0	182.5	-
63.1	181.5	-
66.5	180.0	-
68.5	178.0	-
70.2	177.0	-
72.8	174.0	-
74.8	171.0	-
80.7	161.5	-
85.7	150.5	-
88.9	142.0	-
89.2	138.8	-
92.0	127.1	113.0
92.3	128.0	-
96.1	117.0	113.0
97.3	117.8	"
100	121.0	-
(1+1)		

Carbazol ($C_{12}H_9N$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Slovak, 1920

%	f. t.	E
0	235.6	-
6.1	231.1	-
12.1	226.1	-
19.9	218.8	-
29.6	209.1	-
37.9	200.0	-
44.3	192.5	-
50.1	185.1	-
54.0	180.5	-
55.4	177.8	-
60.0	171.5	-
61.7	168.9	-
69.7	156.0	89.0
75.7	144.0	"
84.0	122.0	89.4
90.5	99.8	90.0
96.4	91.4	-
100	93.0	-

Carbazol ($C_{12}H_9N$) + β -Naphthol ($C_{10}H_8O$)

Kremann and Slovak, 1920

%	f. t.	%	f. t.
0	235.5	52.8	186.5
5.4	231.0	59.1	177.5
13.6	223.5	67.0	165.2
20.2	217.8	76.7	152.0
32.0	209.4	84.0	133.6
36.5	205.1	91.2	115.0 E
41.7	198.8	96.5	118.5
46.6	193.6	100	121.0
48.2	192.2		

Acridine ($C_{13}H_9N$) + Phenol (C_6H_6O)

Kremann and Slovak, 1920

%	f. t.	E
0	106.5	-
6.8	96.5	-
14.7	90.5	87.5
22.4	99.8	-
31.2	99.3	-
38.9	91.5	-
45.9	84.5	-
52.8	86.2	-
59.6	83.8	-
64.8	79.0	-
66.8	77.5	-
68.9	75.5	-
75.0	68.0	-
80.6	58.0	35.8
89.0	43.5	36.5
96.2	38.8	-
100	40.5	-

(3+2)

(1+2)

Acridine ($C_{13}H_9N$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E	%	f. t.	E
0	106.5	-	54.0	131.1	-
4.7	105.0	102-101	63.8	121.0	-
10.0	122.0	102-101	68.3	116.0	-
16.1	131.5	-	74.0	109.0	-
22.7	136.5	-	81.2	98.0	93.5
27.5	140.0	-	86.7	-	93.5
33.1	143.5	-	94.4	99.5	-
40.3	143.5	-	100	102.8	-
45.6	139.2	-			

(1+1)

Acridine ($C_{13}H_9N$) + Resorcinol ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E	%	f. t.	E
0	106.0	-	62.2	101.0	-
5.1	128.0	105	66.3	120.0	94.0
12.5	126.0	-	72.3	109.2	95.8
19.3	176.0	-	77.5	96.4	96.4
22.8	179.5	-	83.5	99.0	-
26.9	179.0	-	90.1	103.0	-
33.2	-	105	97.5	106.5	-
51.6	160-192	-	100	107.8	-
56.8	142.0	-			

(2+1)

Acridine ($C_{13}H_9N$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Slovak, 1920

%	f. t.	E	%	f. t.	E
0	106.0	-	59.5	178.0	-
4.6	185.0	105.5	66.8	170.0	-
10.4	202.5	-	72.2	164.0	159.1
18.3	209.0	-	76.3	159.1	159.1
23.9	209.5	-	83.1	161.5	-
31.4	206.5	-	90.8	164.8	-
36.3	200.0	-	95.4	167.1	-
51.0	188.0	-	100	169.0	-
55.7	182.0	-			

(2+1)

Acridine ($C_{13}H_9N$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Slovak, 1920

%	f. t.	E	%	f. t.	E
0	106.5	-	36.0	109.5	-
5.7	98.9	-	39.8	113.8	-
9.1	97.3	-	45.4	115.5	-
11.1	92.5	-	51.0	112.8	-
14.0	94.2	-	56.4	108.0	-
14.9	95.0	-	64.3	98.5	-
17.9	95.5	-	72.5	79.0	78.1
19.5	96.2	-	79.4	77.5	-
23.0	96.5	-	84.9	83.6	-
23.2	96.1	-	89.2	87.5	-
26.1	96.5	-	93.7	91.9	-
29.5	100.5	-	100	93.1	-
30.1	102.5	-			

(1+1)

(2+1)

Acridine ($C_{13}H_9N$) + β -Naphthol ($C_{10}H_8O$)

Kremann and Slovak, 1920

%	f. t.	E	%	f. t.	E
0	106.5	-	44.1	131.1	-
5.0	101.5	-	46.6	132.1	-
5.5	101.5	-	50.9	135.1	-
9.3	97.2	-	51.7	135.0	-
12.7	92.7	92.7	56.5	135.0	-
14.1	92.5	92.5	61.4	133.1	-
18.4	-	91.8	65.4	130.5	-
19.5	94.5	92.5	65.7	130.6	-
21.8	95.8	-	68.4	127.5	-
25.4	95.9	-	74.3	122.0	-
27.9	103.0	95.5	79.8	114.0	109.8
29.2	105.5	-	85.6	110.0	-
34.5	114.0	-	96.0	118.1	-
35.3	117.0	-	100	121.0	-
42.4	127.1	-			

(2+3)

Phenylacridine ($C_{19}H_{13}N$) + Picric acid ($C_6H_3O_7N_3$)

Bassett and Simmons, 1921

mol %	f. t.	mol %	f. t.
100	120.3	65.00	195.4
99.00	119.8	56.85	217.2
91.12	119.3	51.25	226.4
96.93	118.8	50.00	227.7
95.98	112.3	49.25	226.4
92.69	132.4	47.90	225.1
87.47	145.4	41.58	215.7
79.28	161.7	34.46	201.1
75.09	168.8	23.90	175.1
73.60	171.2	23.06	172.0
72.00	173.6	22.00	169.4
70.75	175.6	20.50	169.9
70.00	176.2	17.97	170.7
69.34	178.2	12.94	172.5
69.00	180.4	4.60	178.2
68.80	181.4	0	181.9

(1+2)

(1+1)

Phenylhydrazine ($C_6H_8N_2$) + Phenol (C_6H_6O)

Thole, Mussell and Dunstan, 1913

%	d	η
	50°	
100	1.048	3200
79.8	1.056	5250
59.8	1.065	7485
49.9	1.068	8020
46.3	1.069	8200
37.2	1.069	8050
19.6	1.069	6555
0	1.068	4580

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
	45°		
0	1.5955	60	1.5705
10	.5924	70	.5634
20	.5887	80	.5560
30	.5853	90	.5489
40	.5808	100	.5402
50	.5759		

Phenylhydrazine ($C_6H_8N_2$) + o-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

%	n_D	%	n_D
	40°		
0	1.5980	55	1.5678
10.3	.5921	59.7	.5647
21	.5866	65	.5612
30.6	.5816	70	.5576
41	.5759	80	.5510
46	.5731	90	.5434
50	.5708	100	.5364

Phenylhydrazine ($C_6H_8N_2$) + m-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

%	n_D	%	n_D
	40°		
0	1.5980	54	1.5662
10	.5931	64	.5594
20.5	.5872	72.5	.5537
24.3	.5850	83.2	.5457
29	.5823	90	.5408
48.2	.5706	100	.5327
51	.5692		

Phenylhydrazine ($C_6H_8N_2$) + p-Cresol (C_7H_8O)

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
	40°		
0	1.5980	55.8	1.5643
10.3	.5921	61.7	.5597
20.5	.5862	71	.5531
30.3	.5803	79.8	.5466
40.5	.5739	88.2	.5400
43	.5726	100	.5318
51	.5675		

Phenylhydrazine ($C_6H_8N_2$) + Guaiacol ($C_7H_8O_2$)

Pushin and Rikovski, 1937

mol %	f.t.	mol %	f.t.
0	19	50	8.5
10	12.5	60	0
15	9 E	65	- 5.5 E
20	11.5	70	+ 0.5
30	15.5	80	10
33	16 (2+1)	90	20.5
40	14	100	28

Pushin and Pinter, 1929

mol %	d	η
	30°	
100	1.1236	4450
90	.1231	5950
80	.1214	8210
70	.1212	10920
60	.1193	13150
55	.1179	14650
50	.1168	15260
40	.1109	15770
33.3	.1066	16060
30	.1045	15540
20	.1003	14080
10	.0964	12330
0	.0962	10090

Pushin, Matavulj and Rikovski, 1949

mol %	n_D	mol %	n_D
	30°		
0	1.6030	60	1.5680
10	.5984	70	.5616
20	.5930	80	.5546
30	.5874	90	.5475
40	.5813	100	.5386
50	.5749		

Phenylhydrazine (C ₆ H ₈ N ₂) + Thymol (C ₁₀ H ₁₄ O)			
Pushin, Matavulj and Rikovski, 1949			
%	mol %	n _D	
60°			
0	0	1.5880	
13.3	10	.5765	
25.7	20	.5660	
37.6	30	.5560	
42.7	35	.5521	
49.0	40	.5477	
52.5	45	.5431	
58.0	50	.5392	
67.5	60	.5322	
72.0	65	.5280	
76.3	70	.5242	
84.6	80	.5168	
93.2	90	.5106	
100	100	.5041	

Phenylhydrazine (C ₆ H ₈ N ₂) + o-Chlorphenol (C ₆ H ₅ OC1)			
Pozharskii and Dionisiev, 1956			
mol %	f. t.	mol %	f. t.
0	20	50	43 (1+1)
10	11	60	40
12.5	8 E	70	30
20	20	80	25
30	32	90	1 E
40	40	100	9

Thole, Mussell and Dunstan, 1913			
%	d	%	d
50°			
100	1.203	50.7	1.145
85.25	1.187	25.0	1.108
64.00	1.166	0	1.068
53.50	1.154		

Thole, Mussell and Dunstan, 1913			
%	η	%	η
50°			
100	2015	50.70	8180
85.25	3510	25.00	6955
64.00	7160	0	4580
53.50	8270		

d			
mol %	45°	55°	65°
10	1.10	1.08	1.07
20	1.12	1.10	1.09
30	1.14	1.12	1.11
40	1.15	1.14	1.12
50	1.16	1.15	1.14
60	1.17	1.16	1.15
70	1.20	1.19	1.18
80	1.21	1.20	1.19
90	1.22	1.21	1.20
100	1.24	1.22	1.20

Pozharskii and Dionisiev, 1956			
mol %	45°	η	65°
10	4000	2900	2000
20	4400	3000	2050
30	5500	3900	2400
40	5900	3900	2450
50	5200	3500	2300
60	4500	3000	2000
70	3200	2400	1800
80	2200	1700	1300
90	1800	1400	1100
100	1400	1300	1000

Pushin, Matavulj and Rikovski, 1949			
mol %	n _D	mol %	n _D
25°			
0	1.6055	55	1.5876
10	.6023	60	.5848
20	.5999	65	.5814
30	.5976	70	.5781
40	.5943	80	.5711
45	.5924	90	.5637
50	.5900	100	.5566

Pozharskii and Dionisiev, 1956 (fig.)			
mol %	45°	κ	65°
20	-	0.0007	0.001
30	0.0009	.001	.0012
40	.0011	.0012	.0015
50	.0012	.0015	.0017
60	.0013	.0015	.0017
70	.0012	.0013	.0015
80	.0008	.0010	.0011

Phenylhydrazine ($C_6H_5N_2$) + p-Chlorphenol
 (C_6H_5OCl)

Pushin and Dimitrievitch, 1939

mol %	f. t.	mol %	f. t.
0	19 A I	10	18 (2+1) I
3	18.2 "	12	21 "
5	17.5 "	15	24.5 "
7	16.2 "	17.5	27 "
12	13 A II	20	28.5 "
15	10.5 "	25	31.5 "
17.5	8 "	30	32.7 "
20	5 "	33.3	33.2 "
		35	33 "
20	- 1 (1+1) II	40	32 "
25	+ 7 "	45.5	29 "
30	13.5 "	50	25.7 (2+1) II
35	19 "	54.7	26 "
40	23 "	57.8	15 "
50	26.7 (1+1) I	58.8	13.5 "
54.7	26 "	59.8	11 "
57.8	25 "	61	8.5 "
58.8	24.5 "	64	0 "
59.8	23.7 "	73	11 B I
61	23 "	73.6	12 "
62.7	22 "	75	14.5 "
64	20.5 "	78.6	21 "
67	17 (1+1) II	85	30 "
70	13.2 "	89.5	35 "
71	12 "	94.5	39.5 "
73	8.5 "	100	43 "
75	5 "		
77	1 "	73	- 0.5 B II
		75	3.7 "
67	14.5 (1+3) II	77	7.5 "
73	16 (1+3) I	85	20 "
75	16 "	89.5	25.5 "
78.6	15.5 (1+3) II	94.5	30 "
		100	34 "
61	1.5 (1+3) II ?		
64	4.7 "		
67	7.5 "		
68.8	8.5 "		
70	8.7 "		
71	9 "		

Eutectics

8.5 mol %	15°	A I - (2+1) I
22 "	25°	A II - (1+1) II
48.7 "	26.7°	(2+1) I - (1+1) I
62.5 "	3.5°	(2+1) II - (1+3) II (?)
68.7 "	15°	(1+1) I - (1+3) I
72.5 "	9.2°	(1+1) II - B I tr. t.
75 "	4.3°	(1+1) II - B II
75.8 "	15.9°	(1+3) I - B I

Complexes

(2+1)	33.2°	(1+1)	26.7°	(1+3)	16°
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Pozharskii and Dionisiev, 1956

mol %	f. t.	mol %	f. t.
0	20	60	11
7	12 E	67	2 E
20	29	70	4
30	31	80	21
40	30	90	31
45	16 E	100	40
50	17 (1+1)	(1+2)	

mol %	d	35°	45°	55°
10	1.11	1.09	1.08	
20	1.12	1.11	1.10	
30	1.15	1.14	1.13	
40	1.17	1.15	1.14	
50	1.18	1.17	1.16	
60	1.20	1.19	1.18	
70	1.22	1.20	1.19	
80	1.24	1.23	1.22	
90	1.25	1.24	1.23	
100	-	1.26	1.24	

mol %	η	35°	45°	55°
10	6000	4000	3000	
20	8000	5000	3200	
30	10000	6000	4000	
40	12400	7000	4600	
50	13000	7100	4700	
60	12400	7000	4500	
70	10700	6000	4000	
80	8100	5000	3200	
90	6400	4000	2900	
100	-	3700	2600	

Pushin, Matavulj and Rikovski, 1949

mol %	n _D	mol %	n _D
	40°		
0	1.5980	60	1.5786
10	.5956	69	.5741
22.5	.5919	79	.5695
29	.5901	89	.5646
42	.5857	100	.5593
50	.5826		

Pozharskii and Dionisiev, 1956

mol %	κ	35°	45°	55°
10	-	-	0.001	
20	-	0.001	0.0017	
30	0.001	0.0017	0.0021	
40	0.0017	0.002	0.0035	
50	0.002	0.0038	0.005	
60	0.0032	0.005	0.0065	
70	0.004	0.007	0.01	
80	0.005	0.008	0.018	
90	0.0045	0.006	0.0095	
100	-	0.0035	0.005	

Hydrazobenzene ($C_{12}H_{12}N_2$) + o-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	126.0	-
10	119.2	-
20	108.5	-
30	102.0	-
40	90.5	23.0
50	85.2	24.0
60	74.0	25.5
70	61.8	26.0
80	44.0	26.5
90	34.2	26.5
100	30.0	-

Hydrazobenzene ($C_{12}H_{12}N_2$) + p-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	126.0	-
10	118.2	-
20	109.0	-
30	103.0	-
40	95.0	-
50	86.8	-
60	77.5	23.8
70	67.2	28.0
80	55.5	30.8
90	40.2	30.8
95	30.8	-
100	37.0	-

Azobenzene ($C_{12}H_{10}N_2$) + Resorcinol ($C_6H_4O_2$)

Kremann, Zechner and Weber, 1924

%	f. t.	%	f. t.
0	65	42.9	88.5
8.8	59	52.4	92.5
16.3	66.5	61.2	97.2
23	76.0	69.8	101.5
30.8	81.5	81.2	106.5
36.4	84.5	91.3	111

E : 57-2°

Azobenzene ($C_{12}H_{10}N_2$) + Hydroquinone ($C_6H_4O_2$)

Kremann, Zechner and Weber, 1924

%	f. t.	%	f. t.
0	65	39	159
1.9	71	46.8	161
5.2	110	53.1	163
6.7	116	59.2	164
11.1	133.5	78.2	167
16.7	143	88.1	167.5
19.7	147	90.2	169
29.3	155	100	170
29.9	155		

E : 55°

Azobenzene ($C_{12}H_{10}N_2$) + Pyrocatechol ($C_6H_4O_2$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
6.81	62.5	-
12.75	60	60
19.7	67.5	-
24.18	71	-
28.4	75	60
34.56	79	-
41.1	83	60
46.36	84.6	-
50	86	-
50.8	86	60
54.55	88	-
60	90	-
65.5	91.5	-
71.95	93	-
77.5	95	-
84.04	97	-
89.02	99	-
94.95	102	-
100	104.5	-

Azobenzene ($C_{12}H_{10}N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol %	f. t.	E
100	108	-
90	100.5	62
80	97	63
70	94	64
60	91	66
50	89	65
40	87.5	66
30	85	66
25	83	"
20	80	"
15	75	"
10	-	"
7.5	66	"
5	66.5	"
0	68	-

Azobenzene ($C_{12}H_{10}N_2$) + Pyrogallol ($C_6H_6O_3$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
5.58	85	65
15.82	107	-
22.6	112	-
28.16	114	-
33.7	114	65
34.89	114	"
40.2	114	"
41.1	114	"
45.4	114	"
50.5	114	-
59.8	117	-
86.9	123	-
100	132	-

Azobenzene ($C_{12}H_{10}N_2$) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
15.3	58	-
25	52	-
30.6	48.5	-
37.2	44	29
41.3	42	"
46.3	38	-
49.8	36	29
53.5	33	-
59.4	29	29
66.6	31	"
69.9	33	-
70.5	32.5	29
75.8	34.5	-
76.2	35	29
80.9	37	"
83.7	37.5	-
85.6	39	-
92.14	41	-
100	44	-

Sorum and Durand, 1952

%	f. t.
0	67.0
-	29.0 E
100	44.8

Petrucchi and Sorum, 1956

%	f. t.
0	67.4
-	28.7 E
100	44.9

Hrynakowski and Jeske, 1938

%	E	%	E
at room t.			
0	2.2	62	9.6
15-16	3.9	75	20.2
29	5.6	82	21
39	6.8	100	24.6
56	8.8		

Azobenzene ($C_{12}H_{10}N_2$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
9.7	63	-
15.9	61	-
23.8	58	58
34.6	65.5	-
41.9	71	58
44.3	72	-
47.8	73.5	58
51.3	75	"
56.6	77	"
58.83	78	-
62.1	79	58
64.5	80	-
68.97	81.5	-
70.0	81	-
76.8	83.5	-
76.92	84	-
83.93	86.5	-
84.2	87	-
90.9	89.5	-
93.5	91	-
100	95	-

Azobenzene ($C_{12}H_{10}N_2$) + p-Nitrophenol
 ($C_6H_5O_3N$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
14.2	51.8	-
23.6	55	-
29.2	64	49
36.9	75	-
48.4	84	-
60.1	93	-
67.8	98	49
73.9	101	-
84.0	107	-
92.7	111	-
100	113.5	-

Sorum and Durand, 1952

%	f. t.
0	67.0
-	50.2 E
100	113.5

Petrucci and Sorum, 1956

%	f. t.
0	67.4
-	49 E
100	113

 Azobenzene ($C_{12}H_{10}N_2$) + 2,4-Dinitrophenol
 ($C_6H_4O_5N_2$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
5.2	64	-
9.8	62	-
12.9	61	-
19.7	57.5	54
24.7	55.5	"
29.3	56	"
34.8	61	"
40.5	68	"
47.3	75	"
47.4	75	-
51.6	78	54
59.6	85	-
68.2	92	-
78.6	99.5	-
88.8	106.5	-
100	112	-

 Azobenzene ($C_{12}H_{10}N_2$) + Picric acid
 ($C_6H_3O_7N_3$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
8.7	64	-
17.9	61	-
32.5	56	56
42.8	74	-
49.9	82	-
55.6	89	-
60.0	91	56
67.3	98	-
78.8	105	56
84.96	110	"
92.5	115	-
100	121.5	-

Hrynakowski and Jeske, 1938

%	E	%	E
at room t.			
0	2.2	62	3.6
18	2.6	75	3.8
29	2.9	89	3.95
38	3.2	100	4.0
51	3.2		

 Azobenzene ($C_{12}H_{10}N_2$) + α -Naphthol ($C_{10}H_8O$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
100	95.5	-
90.9	88.5	-
79.5	81	-
70.2	75	-
61.1	68	48
48.5	59	48.5
43.5	56	-
38.7	52.1	-
34.0	48.5	48.5
29.1	50.5	48.5
23.4	53	-
17.0	57	-
10.4	60	-
0	65	-

A. and L. Kofler, 1948

%	f. t.
0	68
32	50 E
100	96

Sorum and Durand, 1952

%	f. t.
0	67.0
-	44.9 E
100	95.5

Azobenzene ($C_{12}H_{10}N_2$) + β -Naphthol ($C_{10}H_8O$)

Kremann, Zechner and Weber, 1924

%	f. t.	E
0	65	-
10.2	57.5	-
14.2	52.8	51
23.9	60.5	-
31	70	-
36.4	76	-
46.3	86	-
52.8	91	-
60.6	97	-
72.4	105	-
84.2	112.5	-
91.2	115	-
100	121	-

Kofler and Brandstätter, 1942

%	f. t.
0	68
-	58 E

Sorum and Durand, 1952

%	f. t.
0	67.0
-	51.6 E
100	121.0

Glutaronitrile ($C_5H_6N_2$) + m-Cresol (C_7H_8O)

Phibbs, 1955

mol %	η	mol %	η
28°			
100	11360	33.0	6060
63.8	7800		

Benzonitrile (C_7H_5N) (b. t. = 191.1) + Phenols

Lecat, 1949

2nd Comp.		Az		
Name	Formula	b. t.	%	b. t.
Phenol	C_6H_6O	182.2	20	192.0
o-Cresol	C_7H_8O	191.1	51	195.95
m-Cresol	C_7H_8O	202.2	89	202.5
p-Cresol	C_7H_8O	201.7	86	202.1

Benzonitrile (C_7H_5N) + Methyl salicylate
($C_8H_8O_3$)

Perkin, 1896

mol %	d	(α) _D ^{mol} magn.
15°		
50	1.1091	26.110

ETHYLAMINE + FORMIC ACID

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XXXIII. NITROGEN DERIVATIVES + ACIDS .

Ethylamine (C_2H_7N) + Formic acid (CH_2O_2)

Bastich, 1947

mol %	f. t.	mol %	f. t.
100	8.3	60	-19
95	+ 0.5	59	-21
90	-15.5	57	-23
85	-41.5	55	-13
77	-34	50	- 3
75	-24	45	- 9.5
70	-14	40	-23
66.6	-12.6	33.3	-58
63	-14.5	(1+2) (1+1)	

Propylamine (C_3H_9N) + Isobutyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	20°	n_D	45°
0	1.3877	1.3725	
14.90	.4088	.3970	
28.19	.4222	.4118	
34.89	.4320	.4238	
45.28	.4402	.4325	
47.71	.4418	.4336	
50.22	.4419	.4337	
51.88	.4310	.4330	
54.93	.4387	.4307	
64.98	.4317	.4232	
73.65	.4248	.4157	
86.29	.4104	.4006	
100	.3928	.3819	

Propylamine (C_3H_9N) + Isovaleric acid ($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	20°	n_D	50°
0	1.3877	1.3725	
15.65	.4100	.3980	
25.15	.4225	.4145	
35.35	.4340	.4265	
45.47	.4413	.4334	
50.03	.4428	.4346	
55.25	.4402	.4320	
63.14	.4357	.4272	
72.24	.4302	.4212	
81.31	.4228	.4133	
100	.4030	.3923	

Dimethylamine (C_2H_7N) + Formic acid (CH_2O_2)

Bastich, 1947

mol %	f. t.	mol %	f. t.
100	+ 8.3	55	+20
95	- 2	50	27.2
90	-20	33.3	18
85	-39	20	- 1
65	-45	10	-15
62.5	-19	5	-30
60	- 3.5 (1+1)	0	-96

Trimethylamine (C_3H_9N) + Formic acid (CH_2O_2)

Lecat, 1949

%	b. t.
0	35
24.5	179 Az
100	100.75

Trimethylamine (C_3H_9N) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b. t.
0	35
20	154 Az
100	118.1

Isobutylamine ($C_4H_{11}N$) + Acetic acid ($C_2H_4O_2$)

Patten, 1902

%	n_D	%	n_D
0 below 0.0002	25°	68.56	28.20
2.95	0.01316	72.09	35.30
5.82	0.1337	74.09	39.10
11.45	2.72	77.11	43.80
13.77	5.48	79.00	47.60
15.88	9.32	80.18	49.20
17.92	12.26	81.22	50.10
20.00	14.51	82.09	51.00
22.95	15.42	83.19	51.60
27.87	12.19	84.57	51.70
30.92	7.95	84.79	52.20
34.43	5.46	85.02	51.00
38.33	2.41	88.32	45.80
41.42	1.474	91.41	34.30
47.38	3.27	94.18	19.60
51.96	6.45	95.69	10.82
56.49	10.50	97.34	1.94
53.03	19.20	100	below 0.0002
65.87	23.20		

Diethylamine ($C_4H_{11}N$) + Formic acid (CH_2O_2)

Bastich, 1947

mol %	m. t.	f. t.
100	8.3	8.3
95	- 2	- 1.8
90	-	-16
85	-	-34
65	-	-20
60	-	+ 5.5
55	-	24
50	35	35.2
40	28.5	29
32	21	21.5
30	19	19
20	-	19
10	-	19
5	-	19
3	-	16
2	-	4
0	-	-49

Diethylamine ($C_4H_{11}N$) + Isobutyric acid
($C_4H_8O_2$)

Matavulj, 1939

mol %	n_D	mol %	n_D
25°			
0	1.3696	52.88	1.4255
15.42	.3871	55.09	.4253
25.73	.3994	64.62	.4212
36.27	.4138	74.70	.4142
46.01	.4234	83.53	.4047
48.43	.4242	100	.3819
51.30	.4257		

Diethylamine ($C_4H_{11}N$) + Propionic acid
($C_3H_6O_2$)

Coleman and Prideaux, 1937

mol %	d	η	σ	κ
25°				
0.0	0.7045	350	19.28	0.00
11.8	.7520	-	-	0.12
18.6	.7800	-	-	3.12
23.8	.8021	-	21.57	7.07
32.3	.8410	15300	23.95	16.5
41.9	.8890	30600	29.20	13.1
46.8	.9133	46100	30.97	12.5
50.0	.9260	55000	31.45	12.1
52.7	.9348	56200	31.56	11.9
55.6	.9422	53900	-	-
57.7	.9473	37900	31.63	13.6
64.7	.9623	16800	31.32	17.5
75.9	.9820	-	30.21	29.3
80.6	.9872	-	-	32.9
84.2	.9902	-	-	31.0
87.6	.9913	-	28.13	25.2
92.4	.9906	-	-	8.29
97.0	.9880	-	-	0.09
100.0	.9844	1020	26.06	0.00

Diethylamine ($C_4H_{11}N$) + Isovaleric acid
($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	20°	50°
0	1.3850	1.3654	
16.06	.4038	.3897	
25.23	.4169	.4030	
35.89	.4289	.4175	
45.00	.4351	.4239	
49.98	.4373	.4260	
54.83	.4367	.4259	
64.62	.4329	.4227	
74.12	.4278	.4171	
80.57	.4231	.4120	
100	.4030	.3902	

Amylamine ($C_5H_{13}N$) + Acetic acid ($C_2H_4O_2$)

Patten, 1902 (fig.)

%	κ	%	κ
25°			
100	below 0.0002	84.50	43.50
99.13	0.223	81.40	43.80
98.60	0.607	79.25	41.00
98.03	1.28	75.40	37.20
96.85	4.10	69.10	24.70
95.77	8.16	61.20	14.00
94.18	15.40	53.60	6.52
93.07	20.20	37.70	2.18
92.14	25.20	32.80	5.62
90.75	28.20	23.30	9.20
90.01	32.90	16.98	6.03
88.47	37.80	11.30	0.117
87.10	40.90	5.40	0.0315
85.30	43.40	0	below 0.0002

Triethylamine ($C_6H_{15}N$) + Formic acid (CH_2O_2)

Joukovsky, 1933

%	f. t.	E
100	+ 8.5	-
95.2	+ 5.0	-
89.5	- 1.0	-
82.3	-18.0	-
80.1	-24.0	-
55.3	(-75.5)	(-90.5)
33.7	-13.5 $L_1 + L_2 (1+1)$	-
17.3	-14.7 "	-
12.4	-13.5 "	-119.5
0	-114.7	-

Triethylamine ($C_6H_{15}N$) + Acetic acid ($C_2H_4O_2$)						64.98 .4317 .4195 66.43 .4320 .4199 70.27 .4317 .4202 72.52 .4305 .4196 75.11 .4288 .4180 85.04 .4171 .4060 100 .3928 .3798		
Lecat, 1949								
% b.t.								
0 89 12.5 162 Az 100 118.1								
van Klooster and Douglas, 1945								
L % V b.t.								
0.0 0.0 L ₁ +L ₂ 89.4 40 and 13 1.0 92.6 57.5 1 105.5 61 1 128.5 66 1 147 68.5 59 162.5 69 69 163 Az 69.5 78 162.7 70 99 160 78 99.5 134.5 100 100 118.2								
% sat.t. % sat.t.								
3.87 13.5 L ₁ +L ₂ 30.5 126.5 7.91 57.0 39.5 98.8 11.8 77.6 44.5 42 20.8 126.5 46.0 20								
C.S.T. : 25 % 130°								
% d n _D								
25°								
100 1.045 1.3722 95.3 1.045 .3828 89.6 1.045 .3950 86.5 1.041 .3991 76.75 1.030 .4127 74.0 - .4163 70.1 1.017 .4208 63.6 1.009 .4275 57.65 0.994 .4326 54.2 0.976 .4338 50.4 0.952 .4332 46.0 0.936 .4304 4.0 - .4009 0.0 0.723 .3990								
Triethylamine ($C_6H_{15}N$) + Isobutyric acid ($C_4H_8O_2$)								
Matavulj, 1939								
mol % 20° 50°								
0 1.4003 1.3839 15.31 .4058 .3908 25.35 .4102 .3953 35.80 .4153 .4012 44.84 .4207 .4071 50.10 .4238 .4110 55.01 .4268 .4143								
Triethylamine ($C_6H_{15}N$) + Isovaleric acid ($C_5H_{10}O_2$)								
Matavulj and Hojman, 1939								
mol % 20° 50°								
0 1.4003 1.3839 15.22 .4080 .3928 25.27 .4130 .3985 34.84 .4188 .4045 45.07 .4250 .4120 50.14 .4282 .4152 55.17 .4311 .4180 65.86 .4344 .4226 70.06 .4340 .4227 72.09 .4333 .4221 74.22 .4320 .4212 84.61 .4229 .4118 100 .4031 .3902								
Octadecylamine ($C_{18}H_{39}N$) + Acetic acid ($C_2H_4O_2$)								
Pool, Harwood and Ralston, 1945								
mol % I f.t. II III								
100.0 16.63 - - 97.9 15.4 - - 96.4 14.8 - - 94.8 16.2 - 13.7 89.9 28.0 - - 84.8 40.0 32.7 30.5 79.8 51.4 42.6 40.5 74.0 - - 50.8 73.9 59.3 53.6 50.0 72.0 59.8 53.3 49.9 70.8 60.4 58.3 51.1 70.7 60.3 - 51 70.5 60.3 58.3 52 68.8 62.0 51.4 40.5 68.3 63.2 56 41.1 67.5 64.9 - 42.2 67.4 64.8 56.8 - 67.1 65.4 - 43.2 65.2 67.7 59.1 46.2 63.1 72.7 - 48.7 56.9 80.9 72.5 56.3 52.4 84.0 - - 50.0 84.4 - - 33.3 79.5 - - 26.0 77.1 - - 14.6 73.5 - - 6.2 70.4 - - 3.7 67.9 - - 1.0 62.6 - 52.9 (1+1)								

Ethylenediamine ($C_2H_6N_2$) + Formic acid (CH_2O_2)

Bastich, 1947

mol %	f. t.	mol %	f. t.
100	+8.3	66.6	89
95	- 7	60	83.5
93	-15	55	54
90	-12	50	+12
85	+13.5	25	-12.5
80	37	15	+ 1.7
73	75	0	+ 8.5

Ethylenediamine ($C_2H_6N_2$) + Maleic acid
($C_4H_4O_4$)

Dionisiev, 1949

mol %	f. t.	E
0	8.5	-
3	7	-
6	6	4
10	4	4
13	26	-
20	80	-
25	106	-
33.3	130	-
40	138	-
50	148 (1+1)	-
55	143	-
60	138	-
66.7	120	-
75	109	-
80	100	-
85	90	90
90	102	90
95	116	-
97	120	-
100	130	-

Ethylenediamine ($C_2H_6N_2$) + Benzoic acid
($C_7H_6O_2$)

Dionisiev, 1949

mol %	f. t.	E
0	8.5	-
2	- 3	-
5	- 7	-
10	-10	-
15	-13	-23
25	-22	-23
26	-23	-23
31.5	-18	-
44.1	20	-
47.9	48	-
50	89	-
60	120	-
66.66	135	-
75	125	-
80	90	90
90	105	90
92	113	-
94	119	-
100	121.4 (1+2)	-

Ethylenediamine ($C_2H_6N_2$) + o-Phthalic acid
($C_8H_6O_4$)

Dionisiev, 1949

mol %	f. t.	E
0	8.5	-
2	4	-
4	1	-
6	- 1	- 2
8	- 2	- 2
10	6	-
15	23	-
20	46	-
25	110	-
33.3	212 (1+1)	-
40	198	-
45	185	-
48	168	168
50	175	-
55	194	-
60	212	-
66.7	232	-
75	191	-
80	165	-
85	142	-
88	137	137
92	150	138
96	163	-
100	197 (1+2)	-

Ethylenediamine ($C_2H_6N_2$) + Salicylic acid
($C_7H_6O_3$)

Dionisiev, 1949

mol %	f. t.	E
0	8.5	-
2	7	-
6	- 2	-
10	-12	-20
13	-20	-20
20	-11	-
25	- 7	-
33.3	6	-
40	35	-
50	50 (1+1)	-
55	44	-
60	37	37
66.7	58	37
75	102	-
80	127	-
90	150	-
100	156.5	-

Aniline (C_6H_7N) + Formic acid (CH_2O_2)

Pushin, Matavulj and al., 1940-46

%	mol %	n_D
40°		
100	100	1.3640
81.7	90	.4139
66.4	80	.4532
59.7	75	.4724
53.6	70	.4885
49.8	66.7	.5013
42.6	60	.5164
33.1	50	.5322
24.8	40	.5444
17.5	30	.5525
14.2	25	.5575
11.0	20	.5621
5.2	10	.5688
0	0	.5756

Aniline (C_6H_7N) + Acetic acid ($C_2H_4O_2$)

Heterogeneous equilibria .

O'Connor, 1921

mol %	f. t.	mol %	f. t.
100	16.6	85.5	- 0.3
96.9	14.8	84.2	- 3.0
92.4	10.8	83.4	- 6.0
89.9	7.8	81.9	- 9.8
88.2	4.8	80.2	-15.8
87.0	2.8	79.7	-18.2
86.2	+ 1.0		
85.1	- 8.1	50.0	11.8
85.0	- 6.1	47.5	10.4
83.25	- 0.4	45.5	9.2
82.1	+ 2.2	44.5	8.5
81.4	5.0	42.9	7.8
80.4	7.0	41.5	6.9
78.5	10.8	39.7	5.6
75.0	14.0	38.7	4.9
72.3	15.5	37.2	4.0
69.8	16.3	33.3	0.9
67.0	16.7	29.4	- 2.6
64.5	16.5	27.7	- 4.3
60.5	15.8	25.75	- 6.4
59.0	15.3	23.3	- 9.2
57.3	15.0	22.0	-10.7
55.5	14.3	20.65	-12.8
52.7	13.1 (1+2)	17.7	-17.0
43.2	-20.9	21.3	-16.9
41.2	-20.3	16.75	-14.9
39.4	-19.8	11.9	-12.4
36.3	-19.4	10.4	-11.8
33.3	-19.4	4.8	- 8.8
30.0	-19.8	3.0	- 7.8
27.5	-19.8	0	- 6.0
26.0	-19.2		
	(1+2)	(2+1)	

Kremann, Weber and Zechner, 1925

%	f. t.	%	f. t.
100	17	84.7	5
88.7	9.5	79	-4

Pushin and Rikovski, 1932

mol %	f. t.	E	f. t.
I			
0	- 6	-	-
10	-10	-	-
15	-12	-	-
20	-14	-	-
25	- 6.5	-12	-17
30	- 2	-15	-19.5
33.3	+ 1	-16	-
37	3.5	-	-23
40	5.5	-	-
45	9	-30	-
50	11.5	-	-
55	13.5	-	-
60	15.5	-	-
63	16.3	-	-
66.7	17.0	-	-
70	16.0	-	-
75	14.0	-	-
80	8	- 6	-
85	1	-	-
90	6.5	- 6	-
100	16.5 (2+1)	- (1+2)	-

Properties of phases .

Faust, 1912

mol %	17.5°	d 58.5°	100°
100	1.057	1.012	0.964
90	1.088	1.036	0.985
80	1.096	1.054	0.990
70	1.089	1.052	0.987
40	1.055	1.022	0.973
0	1.021	0.988	0.953

Thole , Mussell and Dunstan, 1913

mol %	25°	d 50°
100	1.052	1.0175
84.5	1.082	1.047
75.3	1.091	-
62.1	1.088	1.056
59.1	1.085	1.057
55.5	1.084	1.051
50.45	1.076	-
37.7	1.061	1.035
0	1.022	0.992

Sakhanov, 1913				Angelescu and Eustatin, 1936			
%	d	%	d	mol %	d	mol %	d
25°				25°			
100	1.046	83.29	1.079	100	1.0525	51.41	1.0645
99.296	1.046	77.83	1.083	93.54	1.0754	40.81	1.0515
98.28	1.049	73.42	1.088	86.46	1.0884	28.68	1.0381
95.78	1.055	71.67	1.090	78.90	1.0910	15.32	1.0267
91.51	1.065	64.23	1.088	70.96	1.0867	0	1.0176
86.15	1.076	0	1.018	61.60	1.0766		
Mathews and Cooke, 1914				Klochko and Chanukvadze, 1938			
t	d	t	d	mol %	d	mol %	d
56 %				25° 50° 75°			
25	1.0827	55	1.0500	100	1.042	1.014	0.985
40	1.0657	70	1.0335	96.18	1.061	1.034	1.004
				93.48	1.069	1.041	1.011
				90.28	1.072	1.047	1.016
				86.8	1.080	1.052	1.019
				81.4	1.085	1.058	1.030
				77.1	1.093	1.065	1.036
				74.3	1.089	1.061	1.033
				71.4	1.087	1.059	1.028
				70	1.086	1.057	1.027
				65	1.081	1.052	-
				62.3	-	-	-
				57.2	1.064	-	-
				50.3	-	1.040	1.013
				45.4	1.54	-	-
				40.4	1.045	1.029	-
				32.5	-	1.021	0.998
				28.2	-	-	-
				20.1	1.027	-	-
				14	1.017	1.007	0.985
				0	-	0.996	0.976
Rabinovich, 1921				Faust, 1912			
%	d	%	d	mol %	η	mol %	η
21°				18° 59° 100°			
100	1.053	70.90	1.092	100	1010	700	430
99.69	1.054	59.40	1.085	80	19200	2930	740
99.37	1.055	51.06	1.075	75	21550	3370	850
98.13	1.058	39.88	1.063	70	22570	3540	830
95.20	1.065	27.25	1.050	60	19550	3220	800
90.94	1.075	18.20	1.039	40	8700	2230	700
88.58	1.079	10	1.030	20	4600	1740	600
87.67	1.081	6.43	1.026	0	3280	1500	520
86.06	1.083	4.77	1.024				
82.53	1.087	0	1.018				
79.45	1.089						
Pound, 1924				Sakhanov, 1913			
%	d	%	d	%	η	%	η
30°				25°			
100	1.03779	60.295	1.08024	100	1110	83.29	7710
71.31	.08426	41.442	.06071	99.296	1180	77.83	12290
64.195	.08243	0	.01310	98.28	1330	73.42	16180
				95.78	1830	71.67	17750
				91.51	3070	64.23	21800
				86.15	5650	0	3640
Pound and Russel, 1924							
%	d	%	d				
30°							
0	1.01201	59.155	1.07744				
7.626	.01913	61.915	.08010				
15.286	.02672	65.380	.08197				
21.306	.03379	71.427	.08340				
29.426	.04419	79.944	.07935				
39.208	.05677	85.403	.07262				
47.657	.06700	93.392	.05577				
52.340	.07200	100	.03733				

Thole, Mussell and Dunstan, 1913

%	η	
	25°	50°
100	1340	791.1
84.5	7290	2960
75.3	12300	-
62.1	21900	5650
59.1	21400	5580
55.5	20300	5230
50.45	18100	-
37.7	11800	3820
0	3620	2010

Mathews and Cooke, 1914

t	η	t	η
	56 %		
25	18210	55	4188
40	7825	70	2606

Pound, 1924

%	η	%	η
	30°		
100	1031	60.295	1623
71.31	1371	41.442	-
64.195	1604	0	3226

Pound and Russel, 1924

%	η	%	η
	30.4°		
0	3193	59.155	15340
7.626	3616	61.915	15530
15.286	4137	65.380	15210
21.306	4996	71.427	13220
29.426	6551	79.944	8295
39.208	9291	85.403	5183
47.667	12255	93.392	2206
52.340	13813	100	1067

Angelescu and Eustatin, 1936

mol %	η	mol %	η
	25°		
100	1400	51.41	11180
93.54	4080	40.81	7870
86.46	9460	28.68	5480
78.90	15720	15.32	4130
70.96	17810	0	3400
61.60	14740		

Klochko and Chanukvadze, 1938

mol %	η		
	0°	35°	75°
100	2010	1080	660.0
96.18	4149	1719	523.2
93.48	9182	2720	1059.9
90.28	18099	4070	1289.9
86.8	32299	5691	1549.8
81.4	102040	8510	1869.8
77.1	145138	10504	2099.9
74.3	176409	11402	2200.2
71.4	184162	11600	2240.1
70.0	190114	11806	2209.9
66.7	183150	11507	2200.2
65.0	176991	11111	2170.1
62.3	163132	10706	2150.0
57.2	111111	9016	2090.9
50.3	75244	7704	1909.8
45.4	56486	6510	1761.7
40.4	42698	5571	1619.9
32.5	25799	4480	-
28.2	22701	4219	-
20.1	16498	3610	1420.0
14.0	14200	3300	1350.0
0	9633	2699	1159.9

Angelescu and Eustatin, 1936

mol %	σ	n_D
	25°	
100	29.41	1.37271
93.54	30.26	.40237
86.46	31.81	.42905
78.90	34.13	.45293
70.96	34.73	.47251
61.60	35.83	.49213
51.41	36.82	.51033
40.81	38.02	.52744
28.68	39.02	.54429
15.32	40.22	.56204
0	42.79	.57984

Glazunov, 1914

mol %	n_D	mol %	n_D
	30°		
100	1.37070	44.9	1.52412
92	.40811	28.98	.54916
75.57	.46261	10	.57318
71.1	.47446	0	.58118
53.8	.51066		

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
	25°		
0	1.5827	62.6	1.4917
10	.5698	66.8	.4830
20.6	.5558	70.0	.4760
30.3	.5428	79.8	.4520
40.2	.5290	89.4	.4190
50.5	.5129	100	.3698
59.4	.4979		

Kononov, 1893			
%	κ	21°	16°
96	2.71	-	-
88.64	19.42	16.36	-
84.18	25.20	21.14	-
79.40	27.49	21.95	-
75.97	27.38	-	-
75.52	27.33	21.61	-
72.55	27.03	20.99	-
70.90	26.65	20.55	-
68.76	26.05	19.88	-
67.20	25.75	19.50	-
66.42	25.48	-	-
66.29	25.30	-	-
64.91	25.12	19.03	-
62.67	24.79	18.86	-
59.40	24.28	-	-
58.08	24.05	18.48	-
54.36	23.53	-	-
51.24	23.13	17.52	-
50.06	23.01	-	-
45.60	21.72	17.09	-
42.85	20.58	16.43	-
40.59	19.51	-	-
39.59	18.92	-	-
35.96	16.78	13.97	-
31.86	13.36	-	-
27.25	8.68	7.87	-
25.50	6.95	6.38	-
21.20	3.60	3.59	-
18.20	2.06	-	-
17.70	1.65	1.69	-
17.35	1.49	1.51	-
15.30	0.82	0.86	-
12.90	0.40	0.42	-
10.00	0.13	-	-
7.95	0.06	-	-
6.43	0.04	-	-
4.77	0.02	-	-
0	below 0.01	-	-

Patten, 1902			
%	κ	%	κ
below		25°	
100	0.00002	81.6	37.8
99.2	.130	80.5	38.2
97.5	.997	79.5	38.7
94.4	7.73	77.4	39.6
92.9	12.5	75.4	38.7
91.6	17.2	73.6	38.5
90.2	21.6	63.9	38.1
88.9	25.5	56.4	36.5
87.6	29.6	47.3	33.0
86.7	33.8	40.4	27.8
83.9	35.5	27.0	10.8
82.8	37.0	0	below 0.00002

Rabinovich, 1921			
%	κ	%	κ
25°		21°	
2.29	0.000809	37.7	25.6
4.74	0.0272	38.8	26.7
7.06	0.0707	39.6	27.3
7.20	0.164	40.6	28.0
11.35	0.292	41.4	28.4
13.32	0.650	42.2	29.5
15.2	1.22	43.0	29.5
17.0	2.03	43.9	29.7
18.7	3.05	44.7	30.6
20.3	4.30	45.4	31.5
21.9	5.86	46.9	31.8
23.4	7.37	47.6	32.0
24.8	9.19	48.3	32.2
26.3	11.00	49.0	32.2
27.5	13.00	49.6	31.9
28.9	14.80	50.3	32.6
30.2	16.80	51.6	34.3
31.4	18.00	53.0	30.7
32.5	19.50	60.7	36.5
33.7	20.90	64.7	37.2
34.7	22.20	75.5	41.4
36.8	24.90	83.3	35.8

Sakhanov, 1913			
N	λ	N	λ
25°			
4.273	0.73	0.175	0.20
2.403	1.39	0.0730	0.11
1.236	1.75	0.0204	0.12
0.730	1.31	0.00943	0.15
0.297	0.43		

Pound, 1924			
mol %	κ	mol %	κ
30°			
100	0.0008	73.545	36.62
97.785	2.042	70.19	28.43
96.543	5.610	52.32	27.57
92.807	22.47	41.545	15.50
85.36	37.32	28.08	2.645
79.395	38.80	15.337	0.1356
74.267	36.44	0	below 0.0001
Pound, 1927			
%	κ	%	κ
0	0.000288	30 ⁸ 8.2317	0.05850
1.5955	0.001835	12.763	0.3019
1.6234	0.005095	16.375	0.9927
2.8880	0.005095	85.316	29.31
3.3912	0.006908	90.160	17.53
5.3841	0.018467	90.9315	15.39
8.1905	0.05804		
%	κ	%	κ
93.874	6.354	97.9895	0.1737
95.7545	2.221	98.579	0.0030
95.110	3.442	98.9795	0.00522
97.374	0.4630	99.4554	0.00217
97.9324	0.1955	100	0.00082
			0.00193
Trifonow and Cherbow, 1929			
mol %	κ	mol %	κ
21°			
92.75	20.87	48.83	17.95
83.82	27.59	35.60	8.22
72.01			
Klochko and Chanukvadze, 1938			
mol %	κ	mol %	κ
0°			
100	-	-	0.0008
96.18	3.88	6.31	8.17
93.48	10.0	16.3	21.8
90.28	12.2	22.4	30.0
86.8	11.5	-	34.7
81.4	10.1	23.7	36.1
77.1	8.41	21.6	35.0
74.3	7.75	20.8	33.5
71.4	7.45	20.0	33.0
70	7.27	19.8	32.6
66.7	7.08	19.7	31.7
65	7.07	19.3	30.6
62.3	7.28	19.1	30.0
57.2	7.35	17.7	28.6
50.3	7.41	16.3	23.5
45.4	7.00	13.5	18.3
40.4	5.98	11.2	14.3
32.5	3.96	6.06	6.71
28.2	2.36	3.17	3.15
20.1	0.61	-	0.63
14	0.093	-	0.095
0	-	-	-

mol %	κ	35°	50°	75°
100	-	-	-	-
96.18	9.85	12.1	12.7	
93.48	27.2	34.9	38.8	
90.28	40.4	54.4	64.9	
86.8	47.3	66.3	85.7	
81.4	50.3	72.3	96.3	
77.1	50.0	74.1	100	
74.3	48.8	72.5	98.0	
71.4	47.8	72.3	95.1	
70	47.3	69.6	91.0	
66.7	45.5	66.2	84.8	
65	44.1	62.9	77.2	
62.3	43.2	56.0	61.7	
57.2	36.9	49.4	52.0	
50.3	30.5	37.7	36.8	
45.4	21.8	24.1	20.6	
40.4	17.2	17.7	13.3	
32.5	6.58	5.86	4.04	
Heat constants .				
Vargaftik and Kerjantzev, 1950				
mol %	therm. cond. (cal/cm.sec)	mol %	therm. cond. (cal/cm.sec)	
0	41.2	60	41.9	
20	40.0	80	43.8	
40	41.1	100	40.9	
therm. cond. = thermal conductivity				
Kononov, 1893				
%	U	20-40°		
100	0.458	0.487		
83.32	-	0.525		
79.57	0.496	0.547		
71.67	0.511	0.556		
66.11	0.523	0.577		
55.33	0.522	0.569		
39.46	0.515	0.558		
23.85	0.510	0.542		
17.33	0.501	0.517		
9.24	0.472	0.500		
0	0.461	0.490		
Timofeev, 1905				
%	U	%	U	
20°				
100	0.487	0	0.4915	
54.7	0.556			

Kononov, 1893			
%	Q mix Cal/gr		
	0°	20°	40°
83.32	-	10.85	10.09
79.58	13.50	12.76	11.62
71.67	16.19	15.15	13.68
66.11	17.28	16.00	14.23
59.80	-	15.97	-
55.33	17.01	15.74	14.13
39.46	13.13	12.02	10.62
23.85	7.84	6.86	5.82
18.33	5.67	4.86	4.32
9.24	2.58	2.36	2.15

mol%	Q dil	mol%	Q dil
(by mole acid)	20°	(by mole aniline)	
88.58	781	13.69	242
85.76	962	24.52	547
79.63	1269	32.66	838
75.13	1452	50.26	1846
65.75	1706	65.75	3276
50.28	1828	75.14	4390
32.69	1725	79.68	4973
24.53	1682	85.79	5810
13.63	1532	88.56	6049

Timofeev, 1905			
Initial	%	Final	Q dil (by mole aniline)
100		99.59	6560
99.59		99.02	6550
99.02		98.15	6580
92.3		86.9	6220
68.4		64.9	2100
56.7		54.7	840

Kononov, 1907			
mol %	Q mix (cal/mol)		
24.53	413		
36.30	626		
52.59	908		
65.75	1139		
79.68	1010		

Aniline (C₆H₇N) + Propionic acid (C₃H₆O₂)

Kononov, 1893

%	n	%	n
21°			
85.68	0.67	50.60	5.07
77.70	3.62	44.49	3.45
70.32	6.07	39.24	2.08
63.54	6.84	34.10	1.09
57.39	6.45	29.51	0.54

%	U	
	0°-20°	20°-40°
100	0.458	0.487
75.11	0.554	0.578
69.92	0.563	0.582
64.38	0.568	0.586
59.88	0.570	0.592
54.77	0.554	0.580
45.17	0.541	0.567
0	0.461	0.490

%	Q mix (cal/g)		
	0°	20°	40°
80.11	-	6.92	-
75.12	10.06	8.15	6.34
69.92	11.08	9.00	7.12
68.60	11.18	9.10	7.20
64.38	11.36	9.18	7.22
59.88	11.47	9.25	7.18
54.77	10.80	8.91	7.08
53.49	-	8.84	7.01
45.17	9.29	7.66	6.09

Sakhanov, 1911

N of aniline	λ
25°	
0.410	0.001
0.840	0.004
1.079	0.012
1.453	0.039
1.965	0.110
0.227	
0.543	below 0.001
0.877	0.001
1.120	0.005
1.486	0.013
	0.042
99°	
0.389	0.001
0.781	0.002
1.006	0.003
1.317	0.004
1.792	0.007

Aniline (C_6H_7N) + Butyric acid ($C_4H_8O_2$)

Pound and Russell, 1924

%	d	η
30°		
0	1.01309	3228
22.155	1.00864	4110
38.943	1.00508	4933
48.460	1.00306	5495
65.857	0.99896	5841
69.976	0.99259	5367
76.832	0.98517	4464
82.307	0.97921	3609
100	0.94963	1355

Konovalov, 1893

%	κ	%	κ
21°			
84.35	0.06	41.70	0.34
72.90	0.68	38	0.22
63.20	1.05	29.04	0.08
55.27	0.87	23.50	0.04

%	Q mix (cal/g)		
	0°	20°	40°
78.83	7.08	5.75	4.50
73.70	7.94	6.40	4.84
65.15	9.03	7.07	5.13
59.28	8.51	6.75	5.05
48.94	7.21	6.00	4.77
33.35	4.22	3.64	3.08

%	U	
	0°-20°	20°-40°
100	0.458	0.487
78.83	0.525	0.550
73.70	0.536	0.566
65.13	0.557	0.585
59.29	0.537	0.573
48.94	0.520	0.550
33.35	0.489	0.517
0	0.461	0.490

mol %	Q dil	mol %	Q dil
(by mole acid)	20°	(by mole aniline)	
79.81	0.642	34.55	0.519
74.74	0.764	50.31	1.114
66.41	0.955	60.60	1.542
60.72	1.001	66.38	1.887
50.33	1.079	74.75	2.263
34.60	0.960	77.51	2.526

Aniline (C_6H_7N) + Isobutyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	20°	η_D	50°
0	1.5854		1.5693
15.11	.5578		.5421
24.85	.5403		.5245
35.29	.5218		.5060
48.88	.5025		.4866
49.26	.4965		.4803
55.24	.4855		.4692
63.39	.4702		.4540
65.97	.4652		.4491
69.63	.4580		.4420
74.38	.4485		.4327
84.12	.4283		.4135
100	.3928		.3798

Aniline (C_6H_7N) + Valeric acid ($C_5H_{10}O_2$)

Ampola and Rimatori, 1897

%	f. t.	%	f. t.
0	- 5.96	3.70	- 8.04
0.28	- 6.12	4.36	- 8.44
0.53	- 6.28	7.00	-10.02
0.97	- 6.52	8.27	-10.68
1.55	- 6.85	9.43	-11.20
2.25	- 7.28	13.18	-13.06
2.98	- 7.66		

Aniline (C_6H_7N) + Isovaleric acid ($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	20°	η_D	50°
0	1.5852		1.5691
9.86	.5648		.5429
19.69	.5458		.5299
29.63	.5279		.5121
34.23	.5192		.5034
39.35	.5102		.4944
49.21	.4932		.4774
58.89	.4771		.4611
66.42	.4643		.4483
74.59	.4502		.4343
78.75	.4427		.4272
89.75	.4236		.4082
100	.4030		.3902

Aniline (C_6H_7N) + Palmitic acid ($C_{16}H_{32}O_2$)

Powney and Addison, 1938

mol %	f. t.	mol %	f. t.
5	25	50	45
10	33	60	48
20	38	80	53.5
40	43	100	62.5

Aniline (C_6H_7N) + Benzoic acid ($C_7H_6O_2$)

Baskov, 1913

mol %	f. t.	E	tr. t.	min
0	- 6.0	-	-	-
1.5	- 7.2	-	-	-
4	-	-8.2	-	-
6	-	-8.4	-	-
8	+ 5	-8.4	-	-
12	+13	-8.4	-	-
18	26.1	-8.4	-	(1+1)
30	45.2	-9.0	-	-
40	55.1	-9.0	-	-
45	64.5	-	56.0	27.1
46	65.0	-	55.5	32.0
50	72.3	-	56.0	64.4
52	78.0	-	55.8	51.0
55	79.0	-	55.7	39.8
56	80.0	-	52.5	39.0
60	86.2	-	51.7	25.4
70	96.5	-	53.8	-
80	107.0	-	50.8	6.0
100	121.4	-	-	-

Kremann, Weber and Zechner, 1925

%	f. t.	%	f. t.
8.5	- 2.5	40.9	55.8
10.0	- 0.5	42.5	58.5
12.1	+ 2	49.9	70
14.7	6.5	58.1	82.0
16.9	11.2	61.6	87.0
23.0	22.5	70.2	98
28.1	32	77.5	105
32.3	40.0	85.3	110
34.7	45	92.2	115
37.7	49	100	121

Pound, 1924

%	κ	%	κ
30°			
0	0.000229	7.0350	0.002522
1.9882	0.000951	8.6760	0.003595
2.6944	0.001087	11.224	0.004920
3.1768	0.001097	14.888	0.007344
5.0515	0.001950	18.156	0.01010
5.1114	0.002230		

Baskov, 1913

mol %	κ	
	50°	75°
18	-	0.01262
25	-	0.02045
30	0.03864	0.03698
34	0.05553	0.04365
39	-	0.05644
40	-	0.06188
48	-	0.06579
50	-	0.06067

mol %	κ	
	100°	125°
18	0.01079	0.009054
25	0.01582	0.01249
30	0.02190	-
34	0.02691	0.01994
39	0.03082	0.0299
40	0.03424	0.0299
48	0.03582	0.02409
50	0.03744	0.02500
52	0.03475	0.02469
56	0.03288	0.02349
62	0.02691	0.01765
70	0.01876	0.01210

t	κ	
50 mol %		
75	0.06430	
80	0.05585	
85	0.04870	
90	0.04096	
95	0.03650	
100	0.03292	
105	0.02912	
110	0.02626	
115	0.02552	
120	0.02491	
125	0.02254	
130	0.02087	

Methylaniline (C_7H_9N) + Formic acid (CH_2O_2)

Pushin, Matavulj and Rikovski, 1940-1946

%	mol %	n_D	
		20°	40°
100	100	1.3714	1.3640
79.3	90	.4230	.4157
63.3	80.1	.4590	.4522
58	76.3	.4702	.4638
-	70.4	.4850	-
50	70.1	.4861	.4802
-	67.1	.4924	-
46.2	66.7	.4935	.4878
-	64.2	.4983	-
42.8	63.5	-	.4941
-	63.0	.5006	-
-	60.7	.5049	-
39.3	60.1	.5059	.5007
35	55.4	.5138	.5082
32.4	52.9	.5184	.5127
30.5	50.5	.5219	.5157
28.1	47.7	.5260	.5197
26.6	45.3	.5295	.5227
23.3	41.2	.5345	.5274
16.5	31.6	.5449	.5379
10.1	20.8	.5553	.5468
5.1	11.3	.5625	.5538
0	0	.5709	.5609

Methylaniline (C_7H_9N) + Acetic acid ($C_2H_4O_2$)

Pushin and Matavulj, 1932

mol %		n_D	
		25°	
0	1.5684	62.7	1.4844
10.5	.5572	66.6	.4770
21.4	.5454	71.4	.4660
30.4	.5336	79.6	.4472
40.3	.5204	89.8	.4160
50.4	.5055	100.0	.3698
60.0	.4894		

Konovalov, 1893

%		%	
		κ	κ
90.28	14.91	38.83	9.98
83.59	26.97	37.09	8.53
81.94	28.61	34.31	6.75
79.61	29.93	31.90	5.12
77.70	30.44	27.99	3.09
76.97	30.59	26.07	2.18
74.83	30.57	23.86	1.50
71.94	30.13	21.82	1.00
68.23	28.93	19.79	0.59
64.98	27.34	17.29	0.31
61.02	25.60	16.87	0.28
56.16	22.64	14.74	0.14
49.74	18.43	8.30	0.01
45.83	15.24		

Methylaniline (C_7H_9N) + Isobutyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.5705	1.5554
15.19	.5475	.5327
25.50	.5312	.5164
35.06	.5160	.5012
45.11	.4993	.4847
49.05	.4925	.4779
55.52	.4811	.4666
64.10	.4657	.4512
66.39	.4613	.4469
69.88	.4547	.4403
74.08	.4468	.4325
84.34	.4263	.4125
100	.3928	.3798

Methylaniline (C_7H_9N) + Isovaleric acid ($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5704	1.5552
10.99	.5519	.5362
20.46	.5363	.5212
30.31	.5204	.5053
39.56	.5052	.4902
49.70	.4888	.4738
59.90	.4722	.4572
66.52	.4614	.4468
69.75	.4560	.4415
79.82	.4389	.4245
89.21	.4224	.4088
100	.4030	.3902

Dimethylaniline ($C_8H_{11}N$) + Formic acid (CH_2O_2)

Ampola and Rimatori, 1896 and 1897

%		%	
		f. t.	f. t.
0	+1.96	8.32	-1.04
0.68	+1.32	10.97	-1.30
2.25	+0.32	14.51	-1.60
3.37	-0.12	18.18	-1.94
4.40	-0.44	26.85	-3.48
5.87	-0.75	35.23	-6.56

Pushin, Matavulj and Rikovski, 1940-1946

%	n_D	
	20°	40°
100	1.3714	1.3640
76.3	.4244	.4185
59.1	.4586	.4524
52.4	.4707	.4642
46.5	.4813	.4746
43.8	.4859	.4791
42.5	.4888	.4824
39.1	.4939	.4869
36.1	.4993	.4919
32.5	.5054	.4979
27.3	.5142	.5060
23.9	.5196	.5114
20.5	.5252	.5167
15	.5338	.5252
8.9	.5432	.5338
4.3	.5503	.5408
0	.5582	.5478

Dimethylaniline ($C_8H_{11}N$) + Acetic acid ($C_2H_4O_2$)
O'Connor, 1921

mol %	f. t.	mol %	f. t.
100	16.6	57.4	-14.7
95.7	12.6	53.3	-13.0
92.2	7.9	47.3	-10.6
88.2	1.3	40.0	-9.0
84.3	-5.5	36.2	-8.1
79.8	-13.0	31.4	-6.7
73.4	-20.7	24.9	-5.0
70.1	-24.0	15.9	-2.7
68.0	-21.8	8.5	-0.7
62.8	-18.0	0	+2.2

Pushin and Rikovski, 1932

mol %	f. t.	mol %	f. t.
0	1	66.7	-19.5
20	-4.5	69.0	-20.5
30	-7	75	-23.0
37	-9	78	-24.5
40	-9.8	79	-21.0
45	-11	80	-19.0
50	-13	85	-4.0
55	-14.8	90	+5.0
60	-16.5	100	+16.5

Udovenko, 1940

mol %	d		
	25°	45°	65°
0.00	0.9513	0.9352	0.9190
10.08	.9562	.9399	.9232
20.10	.9621	.9453	.9277
34.24	.9733	.9549	.9367
39.73	.9786	.9601	.9405
49.57	.9914	.9695	.9498
59.78	1.0041	.9832	.9614
70.02	.0217	.9998	.9767
79.28	.0398	1.0170	.9933
84.76	.0493	.0270	1.0025
90.25	.0564	.0334	.0092
100.00	.0427	.0201	0.9975

Joffé, 1952

%	d	
	20°	n_D
100	1.0492	1.3716
90.44	.0627	.3968
81.66	.0638	.4167
60.46	.0395	.4554
50.96	.0255	.4713
40.50	.0077	.4883
25.08	0.9862	.5140
21.00	.9796	.5208
10.98	.9688	.5382
4.77	.9616	.5491
0	.9560	.5585

Udovenko, 1940

mol %	η		
	25°	45°	65°
0.00	1302.4	948.4	742.9
10.08	1363.4	983.5	758.5
20.10	1448.0	1019.7	775.7
34.24	1643.8	1105.7	814.7
39.73	1753.6	1159.6	859.0
49.57	2040.4	1280.6	896.9
59.78	2546.7	1487.8	992.2
70.02	3351.9	1831.2	1152.2
79.28	4244.2	2192.5	1319.8
84.76	4513.5	2327.2	1384.8
90.25	3819.4	2085.0	1302.6
100.00	1106.0	826.4	644.5

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
25°			
0	1.5556	62.6	1.4782
10.7	.5452	66.4	.4713
20.0	.5364	69.7	.4652
30.2	.5252	70.3	.4640
40.3	.5114	75.0	.4550
48.9	.4998	80.3	.4428
58.9	.4842	90.4	.4136
59.5	.4837	100	.3698

Konovalov, 1893

$\%$	κ	$\%$	κ
21°			
99.45	0.06	78.39	22.44
98.96	0.15	78.24	22.42
97.99	0.54	77.59	22.34
97.03	1.27	77	22.20
96.10	2.45	75.63	21.83
95.17	3.93	73	20.43
94.28	5.60	60.96	13.11
92.53	9.30	44.94	4.07
90.85	13.00	38.83	1.90
88.54	17.52	33.24	0.75
86.14	19.23	27.81	0.24
83.82	21.21	20.20	0.03
83.02	21.67	15	0.01
81.75	22.30		

Patten, 1902

%	x	%	x
25°			
100	below 0.002	49.8	9.98
97.0	1.82	49.0	9.41
95.7	4.17	48.5	8.99
94.0	7.54	47.9	8.32
93.1	10.70	47.1	7.80
92.3	13.80	46.2	7.30
90.5	16.80	45.5	6.80
88.2	22.90	44.7	6.26
85.8	31.10	43.9	5.81
80.1	32.70	43.1	5.00
77.8	32.70	42.2	4.57
76.6	32.10	41.1	4.34
75.2	31.50	40.2	3.63
73.1	30.20	39.1	3.16
71.1	29.50	38.5	2.70
68.6	27.60	37.4	2.32
66.0	25.00	36.3	1.98
64.0	23.20	35.2	1.66
62.5	21.70	33.5	1.36
60.7	19.80	32.6	1.10
59.2	18.80	31.8	0.88
58.3	18.10	30.0	0.655
57.6	17.10	28.6	0.515
56.4	16.10	27.1	0.380
55.9	15.60	25.7	0.270
55.3	15.20	24.1	0.167
54.7	14.60	22.5	0.103
54.2	13.90	20.9	0.067
53.8	13.20	19.0	0.026
53.1	12.80	17.2	0.022
52.5	12.60	16.0	0.016
51.9	11.60	14.7	0.011
51.3	11.00	13.4	0.008
50.7	10.40	0	below 0.002

Konovalow, 1893

%	U	%	U
	0°-20°		0°-20°
100	0.458	32.74	0.435
74.10	0.472	20.0	0.423
59.58	0.470	0	0.394
45.23	0.454		

%	Q mix (cal/g)	%	Q mix (cal/g)
	0°		20°
84.95	5.48	5.16	
80.16	6.46	5.94	
74.10	7.23	6.63	
69.99	7.07	6.36	
59.58	6.87	6.11	
45.23	5.12	4.50	
32.74	3.27	2.87	
20	1.92	1.60	

mol % (a)	Q dil	mol % (b)	Q dil
	20°		
91.91	364	33.51	242
89.13	445	49.49	515
85.25	537	62.48	994
79.63	578	74.82	1829
74.85	615	79.65	2262
62.46	597	85.24	3096
49.54	515	89.07	3621
33.51	480	91.93	4148

(a) : amine added .

(b) : acid added .

Dimethylaniline ($C_8H_{11}N$) + Isobutyric acid
($C_4H_8O_2$)

Ampola and Rimatori, 1896 and 1897

%	f.t.	%	f.t.
0.51	1.96	10.67	-2.98
0.51	1.67	14.75	-4.68
1.29	1.28	20.00	-6.99
2.76	0.55	22.39	-7.97
4.98	-0.48	27.82	-10.84
6.77	-1.28		

Matavulj, 1939

mol %	n_D	n_D
	20°	50°
0	1.5578	1.5424
14.93	.5381	.5232
25.56	.5234	.5086
35.12	.5096	.4950
45.10	.4941	.4798
50.30	.4861	.4719
52.76	.4821	.4679
65.00	.4614	.4475
65.98	.4597	.4458
70.23	.4522	.4384
72.10	.4487	.4348
73.30	.4465	.4325
84.27	.4255	.4120
100	.3928	.3798

Dimethylaniline ($C_8H_{11}N$) + Valeric acid
($C_5H_{10}O_2$)

Ampola and Rimatori, 1896 and 1897

%	f.t.	%	f.t.
0	1.96	8.34	-2.06
0.48	1.27	11.26	-3.15
1.11	0.93	18.86	-6.24
2.15	0.47	21.77	-7.44
3.73	-0.22	25.20	-8.98
5.68	-1.08		

Dimethylaniline ($C_8H_{11}N$) + Isovaleric acid
($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	n_D
	20°	50°
0	1.5577	1.5422
10.88	.5422	.5268
20.52	.5283	.5132
30.13	.5143	.4996
35.04	.5070	.4924
40.08	.4995	.4850
50.05	.4844	.4700
60.11	.4689	.4548
65.10	.4612	.4473
66.88	.4584	.4446
69.98	.4533	.4395
74.07	.4468	.4330
80.01	.4370	.4235
89.46	.4212	.4080
100	.4030	.3902

Diethylaniline ($C_{10}H_{15}N$) + Acetic acid ($C_2H_4O_2$)

Udovenko, 1940

mol %	d		
	25°	45°	65°
0.00	0.9296	0.9134	0.8981
9.92	.9350	.9181	.9025
19.85	.9423	.9255	.9083
29.59	.9524	.9349	.9170
39.86	.9628	.9448	.9260
50.22	.9772	.9590	.9397
59.80	.9937	.9748	.9550
70.02	1.0145	.9953	.9750
74.69	.0252	1.0058	.9853
79.82	.0371	.0178	.9973
84.67	.0476	.0277	1.0072
90.27	.0531	.0342	.0147
100.00	.0427	.0201	0.9975

mol %	η		
	25°	45°	65°
0.00	1929.8	1273.5	919.0
9.92	2080.8	1362.8	942.0
19.85	2342.6	1488.7	986.5
29.59	2721.6	1597.1	1064.3
39.86	3462.2	1910.4	1218.3
50.22	4638.6	2408.1	1454.7
59.80	6399.7	3100.1	1769.6
70.02	9548.0	4198.1	2283.3
74.69	10938.8	4720.6	2529.2
79.82	12003.6	5159.3	2733.5
84.67	10947.6	4965.2	2712.0
90.27	6538.2	3527.3	2168.6
100.00	1106.0	826.4	644.5

Mesidine ($C_9H_{13}N$) + Acetic acid ($C_2H_4O_2$)

O'Connor, 1921

mol %	f.t.	mol %	f.t.
B			
100	16.6	85.1	+ 0.1
93.6	12.3	81.7	- 9.3
89.8	8.1	80.0	-13.9
87.9	4.6		
(1+1)			
82.5	-14.7	46.2	19.7
81.3	- 7.2	41.1	18.9
79.2	+ 0.1	36.7	17.8
77.4	4.3	31.3	15.7
74.9	8.7	26.6	13.1
69.8	13.8	22.4	10.0
66.8	16.0	18.8	6.1
61.7	18.2	16.2	2.4
58.1	19.1	13.0	- 2.5
54.1	19.7	10.9	- 7.1
50.1	19.9	7.9	-15.9
A			
9.4	- 9.6	0	- 4.9
6.0	- 7.7		

o-Phenylenediamine ($C_6H_8N_2$) + Acetic acid ($C_2H_4O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	102	50.7	36
0.0	101.5	56.0	15
5.6	96	58.3	3
12.1	90	60.3	- 3
17.9	84	63.9	- 4
23.0	80.0	68.3	- 7
23.8	78.5	74.0	-12
29.1	73	79.1	- 2
32.8	68	82.4	+ 3.5
34.1	68	85.7	7
37.1	62	87.1	8
43.0	53.5	93.1	14
43.1	53.5	93.6	15.5
47.8	45	100.0	17.0
50.3	36		(1+4)

o-Phenylenediamine ($C_6H_8N_2$) + Butyric acid ($C_4H_8O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
100.0	- 8	51.9	45
90.1	-24	50.7	47
87.9	-27	47.9	56
80.0	-37	46.0	58
76.2	-48 E	40.6	66
72.9	-26	32.0	74
70.2	-30	18.6	87
64.6	+ 2	7.1	95
60.5	25	0.0	102
54.9	40		

o-Phenylenediamine ($C_6H_8N_2$) + Succinic acid ($C_4H_6O_4$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	102	78.3	142
4.1	98	88.4	169
59.7	151	100.0	183
66.7	134		
E : 118°			

o-Phenylenediamine ($C_6H_8N_2$) + Benzoic acid ($C_7H_6O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	E	%	f.t.	E
0	102	-	67.5	107	-
6.8	99	-	73.2	105	101.8
17.0	92	-	73.3	105	-
29.7	87	-	78.5	104	101.0
38.3	93	85	80.0	106.5	-
45.6	98	85	84.8	111	-
53.2	101.5	-	85.1	111	101.8
57.6	104	-	88.8	114	-
66.2	107	-	100.0	121	-
63.0	106.2	-		(1+2)	
E : 77 % and 27.50 %					

Pushin and Dezelic, 1938

mol %	f.t.	E	min
0	102.5	-	-
10	95.7	80.5	0.5
15	91.5	84	1.0
20	88	"	1.4
27	84	"	2.5
30	85.5	"	1.6
35	88.3	81.5	0.8
40	91	83	0.3
42	92.5	81	0.2
45	95	91	0.4
48	97	"	0.6
50	98	90	0.8
52	99	"	0.7
55	100.3	"	0.5
57	101	89	0.3
60	102.5	-	-
63	103.5	-	-
65	104	-	-
66.6	104.3	-	-
68	103.5	-	-
70	102	-	-
73	102	-	1.3
80	107.5	100	0.7
90	114.5	99	0.5
100	121	-	-

(1+1)

(1+2)

o-Phenylenediamine ($C_6H_8N_2$) + Cinnamic acid
($C_9H_8O_2$)

Pushin and Dezelic, 1938

mol %	f.t.	E	min
0	102	-	-
10	96	87.5	0.8
20	87.5	"	1.7
30	93	"	1.1
40	96	"	0.4
45	97	-	-
47	97.5	-	-
50	98.5	98.5	1.7
53	99.5	"	1.2
55	100	98	0.9
58	101	96.5	-
60	101.5	-	0.5
63	102	-	-
65	102	-	-
66.6	102.5	102.5	-
69	105	"	0.9
70	106	102	0.8
73	109	100	0.7
75	110	99	0.6
78	113.8	100	0.5
80	115	100.5	0.4
90	125	-	-
100	132	-	-

(1+1)

(1+2)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0	102	-
11.8	95.5	-
25.0	88.0	-
39.0	91.0	86
43.2	92.5	-
49.3	94.5	-
57.2	95.5	-
62.5	95	-
68.3	94	-
77.8	110	92.5
89.8	123	-
100.0	133	-
(1+1)		

o-Phenylenediamine ($C_6H_8N_2$) + Salicylic acid
($C_7H_6O_3$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	101.5	-
12.0	95.5	86
23.7	88	86
31.1	96	-
37.6	106	-
44.5	113	-
50.0	115.5	-
66.0	112	109
70.7	109	-
76.8	125	109
83.4	141	-
89.8	148	-
100.0	155	-
(1+1)		

m-Phenylenediamine ($C_6H_8N_2$) + Acetic acid
($C_2H_4O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0	62	51.0	-20
4.9	58	51.3	-20
10.7	48	55.1	-19
16.3	41	62.3	-17.5
22.8	28	69.0	-16
27.1	23	74.7	-11.5
32.9	11	81.3	+ 4
38.9	- 3	87.2	10.5
42.5	- 9	95.6	16
46.6	-15	100.0	17
48.1	-20		

E : 49 % -21°

: 74 % -16.5° (4+1)

M-PHENYLENEDIAMINE + BENZOIC ACID

m-Phenylenediamine ($C_6H_8N_2$) + Benzoic acid
($C_7H_6O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0	58	-
18.6	57.5	51.2
25.1	64.5	"
31.8	70.5	-
37.7	75.8	-
44.8	80.5	-
51.3	83.5	-
56.8	83.0	-
60.2	82	-
66.8	88.5	81.5
73.1	98	-
78.9	105	-
87.5	113	-
91.3	116	-
95.5	119	-
100.0	121	-

(1+1)

Pushin and Dezelic, 1938

mol %	f.t.	E	min
0	62.5	-	-
10	55	50	1.1
15	50	50	2.1
20	55	50	1.7
30	67.5	48	1.2
35	73	47	0.9
40	75	45	0.6
43	77	43	0.3
47	79.5	75	0.6
50	81.3	74.5	0.8
53	83	74	0.6
56	85	73	-
58	86	86	-
60	92.5	86	0.6
63	96	86	0.8
66.6	98.5	86	1.0
70	101	84	0.6
75	104	81	0.4
80	107.2	80	0.3
90	114	75	-
100	121	-	-

(1+1)

(1+2)

m-Phenylenediamine ($C_6H_8N_2$) + Cinnamic acid
($C_9H_8O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	61.5	51.7	66.5
5.6	59.0	54.5	73.5
11.7	55.5	57.1	83.0
25.7	46.5	62.0	91.5
30.3	43.5	66.1	97.5
35.3	40.0	72.0	105
39.9	36.0	78.3	115
43.0	41.0	83.6	121
47.3	53.0	92.4	129.0
49.0	62.5	100.0	133
50.6	65.5	-	-

E : 41 % 35°

m-Phenylenediamine ($C_6H_8N_2$) + Salicylic acid
($C_7H_6O_3$)

Kremann, Weber and Zechner, 1925

%	f.t.	E	%	f.t.	E
0.0	61	-	59.7	126.5	-
3.3	55	38	63.4	124	-
8.6	42	38	66.5	123	-
17.1	71	-	67.4	123	113
20.9	90	-	71.4	116	113
25.0	96	-	76.5	125	113
33.7	114	-	79.2	130	-
36.0	116	-	86.4	144	-
42.7	122	-	88.7	147	-
48.8	125	-	93.8	151	-
48.2	125	-	94.9	152	-
52.1	126	-	100.0	155	-

E₁ : 9 % 38°E₂ : 73 % 113°

(1+1)

Phenylenediamine ($C_6H_8N_2$) + Cinnamic acid
($C_9H_8O_2$)

Pushin and Dezelic, 1939

mol %	f.t.	E	min
0	62	-	-
10	55	45	0.6
20	49	45	1.6
25	46	46	2.2
30	53.5	42	1.4
33.3	55	42.5	-
35	55.5	40	1.0
38	56.5	44	-
40	57	-	-
45	72	58	0.6
47	79	57.5	1.0
50	82.5	56	1.3
53	88	53	1.2
55	91	55	-
58	95.5	51	1.0
60	98	56	0.8
63	100	51.5	0.7
65	104	61	-
66.6	105	-	-
70	107	-	-
73	110	-	-
80	118	-	-
90	125	-	-
100	132	-	-

(1+1)

p-Phenylenediamine ($C_6H_8N_2$) + Succinic acid
($C_4H_6O_4$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	141	37.5	147
9.6	134	100.0	183
18.9	125 E	E : 19 %	125°
28.9	139	-	-

p-Phenylenediamine ($C_6H_8N_2$) + Acetic acid
($C_2H_4O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
100	16.5	46.9	73
97.3	11.3	42.7	81
90.1	13.0	35.5	93
80.3	15	26.7	107
72.1	30.5	16.4	122
65.5	41	8.2	134
59	53	0	141
50.6	67		
E : 83 %		10°	

p-Phenylenediamine ($C_6H_8N_2$) + Benzoic acid
($C_7H_6O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	141	-
5.2	137	-
11.4	131	126
18.1	128	126
26.5	134	-
34.8	138	-
43.3	141	-
55.2	142	-
55.3	142	-
64.0	138	-
68.7	133	-
75.6	118	104
63.4	138.5	-
71.7	129	-
79.0	106	104
88.9	115	104
100.0	121	-
(1+1)		

Pushin and Wilowitsch, 1925

mol %	f.t.	E
100	121	-
90	113	-
80	102.5	-
70	121	101
65	128	98
60	133	-
55	136	-
50	137	-
45	136	-
40	138	-
35	132	-
30	128	121
25	121	-
20	125.5	-
10	131.5	-
0	140	-
(1+1)		

E: 16% and 79%

p-Phenylenediamine ($C_6H_8N_2$) + Cinnamic acid
($C_9H_8O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	141	59.5	158
7.7	138	63.3	180
17.0	133.5	63.7	180
27.2	125	71.2	110
35.1	120	78.2	115
44.0	120	84.8	121.5
49.7	128	93.5	130
55.0	140	100.0	133

Pushin and Dezelic, 1938

mol %	f.t.	E	min
0	140	-	-
10	131	-	-
15	127	115	0.8
20	122	115	1.1
25	119	114	1.8
28	-	115	-
30	115	115	1.7
35	-	115	1.0
40	122	-	-
45	123.5	-	-
50	124	-	-
55	122	108.5	-
60	119	110	0.3
65	115	108	0.4
71	110	-	0.7
75	110	-	0.6
80	117.5	108	0.4
85	121.5	-	-
90	125	-	-
100	132	-	-

(1+1)

p-Phenylenediamine ($C_6H_8N_2$) + Salicylic acid
($C_7H_6O_3$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	141	-
9.7	135	-
15.4	130	-
21.6	122	100
27.6	106	-
34.3	111.5	-
40.5	122	100
45.6	129.5	-
54.5	136.8	-
60.8	136	107
68.6	120	-
75.6	115	107
81.7	131	-
90.1	147	-
100	155	-

(1+1)

o-Toluidine (C_7H_9N) + Formic acid (CH_2O_2)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	1.2110	1460	39.34	1.37160
96.13	.2060	2440	40.05	.39612
91.87	.1984	3980	40.58	.41897
86.91	.1874	6860	41.29	.44030
81.05	.1707	10020	41.02	.46171
74.08	.1512	14000	41.24	.48618
65.40	.1320	21660	41.88	.50960
0	0.9943	3390	40.12	.56827

o-Toluidine (C_7H_9N) + Acetic acid ($C_2H_4O_2$)

O'Connor, 1921

mol %	f.t.	mol. %	f.t.
B			
100	16.6	89.1	7.4
94.4	13.0	86.6	3.4
91.2	10.4	83.1	-5.9
(1+1)			
84.3	-12.7	35.7	23.1
81.5	+ 0.3	32.7	22.4
78.9	8.6	26.1	20.5
77.0	11.5	20.7	16.9
74.6	15.4	16.9	14.2
72.1	18.2	11.7	8.7
69.2	20.6	9.3	5.0
64.6	22.7	7.6	0.6
58.0	24.2	5.5	- 5.8
52.1	24.7	4.0	-13.8
46.7	24.6	2.3	-25.0
42.9	24.4	1.7	-33.4
A			
7.1	-31.5	0	-27.7
2.0	-28.5		

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	1.0525	1400	29.41	1.37271
94.40	.0694	3630	29.98	.40018
88.34	.0782	8360	31.51	.42477
81.59	.0787	14070	32.41	.44652
74.17	.0727	19160	33.94	.46589
65.63	.0623	16080	34.31	.48385
55.93	.0481	11990	35.34	.50049
44.80	.0332	8170	35.80	.51671
32.97	.0191	5830	36.92	.53194
17.87	.0056	4300	38.01	.54956
0	0.9943	3390	40.12	.56827

Kononow, 1893

%	κ	%	κ
21°			
85.11	17.10	51.74	12.32
83.78	18.11	51.00	12.09
83.50	18.26	49.92	11.73
81.27	19.24	47.78	10.99
79.11	19.56	45.70	10.22
77.43	19.60	41.64	8.51
75.80	19.44	37.79	6.69
72.83	18.74	34.34	4.83
70.73	18.07	30.57	3.00
69.34	17.67	27.18	1.84
64.45	16.05	24.07	0.98
62.70	15.56	21.95	0.57
58.19	14.24	19.37	0.27
55.55	13.57		

o-Toluidine (C_7H_9N) + Propionic acid ($C_3H_6O_2$)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	0.9889	960	27.63	1.38717
92.74	1.0025	1720	27.95	.41040
85.07	.0124	2890	28.69	.43257
76.80	.0189	4290	29.81	.45263
68.30	.0199	5870	30.55	.47144
59.98	.0177	5910	31.77	.48849
48.82	.0129	5580	34.01	.50479
38.24	.0097	5020	34.78	.52111
26.35	.0045	4520	36.16	.53894
14.04	0.9996	4010	38.04	.55471
0	.9943	3390	40.12	.56827

o-Toluidine (C_7H_9N) + Butyric acid ($C_4H_8O_2$)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	0.9545	1370	27.76	1.39807
93.30	.9692	2360	27.23	.42047
82.27	.9796	3810	28.17	.43949
73.37	.9873	4810	28.73	.45733
64.01	.9917	5890	29.79	.47320
54.02	.9950	5940	31.18	.49032
43.68	.9950	5270	33.05	.50719
33.23	.9956	4840	33.82	.52341
22.81	.9957	4410	35.11	.53828
11.95	.9953	3980	36.96	.55447
0	.9943	3390	40.12	.56827

O-TOLUIDINE + BENZOIC ACID

833

o-Toluidine (C_7H_9N) + Benzoic acid ($C_7H_6O_2$)

Baskov, 1913

mol %	f. t.	E	tr. t.	min
0	-24.3	-	-	-
1.5	-26.8	-	-	-
3.0	-29.1	-32.5	-	-
4.5	-	-32.0	-	-
8.0	-	-30.8	-	-
13.0	-13.5	-30.8	-	-
20.0	- 3.5	-45.0	-	-
25.0	+16	-	-	-
35.0	+42.8	-	+6.0	6.2
45.0	63.2	-	-	-
48.0	67.5	-	+6.8	22.9
49.0	69.0	-	6.1	27.2
50.0	70.4	-	6.8	30.1
52.0	75.1	-	6.7	21.8
58.0	83.0	-	5.2	11.7
66.66	91.8	-	1.1	7.8
75.0	100.5	-	0.8	3.2
100	121.4	-	-	-

(1+1)

%			
	75°	100°	125°
3.40	0.001671	-	-
5.66	.001672	-	-
11.24	.002596	0.001258	-
16.75	.002889	-	-
34.91	.004490	-	-
38.08	.005622	0.003230	0.005618
41.13	.005991	.003946	-
48.25	.006916	.004508	0.007752
51.27	.007486	-	.008619
52.26	.007581	0.005160	-
53.26	.007704	.006116	-
54.26	.007326	.006142	-
55.25	.006662	.005924	-
61.15	-	.005834	0.007342
69.50	-	.004965	.005449
77.37	-	-	.004519

m-Toluidine (C_7H_9N) + Formic acid (CH_2O_2)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	1.2110	1460	39.34	1.37160
93.74	.2011	2090	38.02	.39370
87.15	.1834	2650	38.21	.41579
79.57	.1640	3250	38.47	.43888
72.05	.1468	4140	38.44	.46051
62.49	.1283	5890	38.45	.48589
52.68	.1109	8530	38.66	sic. 50877
15.49	.0248	6070	36.08	.55924
0	0.9856	2940	37.00	.56437

m-Toluidine (C_7H_9N) + Acetic acid ($C_2H_4O_2$)

O'Connor, 1921

mol %	f. t.	mol %	f. t.
100	16.6	83.9	- 5.6
93.8	12.0	82.4	- 8.8
89.2	5.6	79.3	-21.6
85.2	- 2.3	-	-
(1+2) form I			
82.3	- 0.2	49.1	4.5
79.0	+ 4.0	42.5	+ 1.0
75.4	7.2	37.7	- 2.3
71.9	9.4	34.5	- 4.8
68.7	9.9	28.6	-10.5
64.8	9.9	23.8	-16.8
58.9	8.9	19.1	-24.0
54.0	7.0	13.5	-38.5
(1+2) form II			
84.2	-14.8	46.6	- 0.3
80.0	- 2.2	42.3	- 3.1
77.0	+ 2.3	36.4	- 7.5
73.3	5.3	34.0	-10.0
67.6	7.2	28.0	-16.3
63.3	6.9	24.1	-21.9
55.8	4.5	20.0	-29.0
52.1	2.8	16.1	-38.0
11.5	-36.8	0	-31.0
6.6	-34.3	-	-

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	1.0525	1400	29.41	1.37271
94.31	.0681	4080	29.46	.40080
88.31	.0772	8170	30.36	.42557
81.30	.0783	15770	31.48	.44983
74.20	.0737	21340	32.29	.46857
65.92	.0609	21100	32.98	.48839
55.86	.0470	16000	33.35	.50358
44.73	.0310	10380	33.91	.51986
32.46	.0146	6420	34.50	.53389
17.42	0.9989	4100	35.47	.54908
0	.9856	2940	37.00	.56437

m-Toluidine (C_7H_9N) + Propionic acid ($C_3H_6O_2$)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	0.9889	960	27.63	1.38717
92.75	1.0046	1950	27.82	.41073
85.17	.0174	4210	27.92	.43480
78.46	.0236	7430	28.69	.45623
68.49	.0236	9480	29.75	.47516
59.33	.0200	9360	30.80	.49194
49.31	.0136	7720	31.84	.50766
38.41	.0068	6030	32.77	.52236
26.54	0.9991	4680	34.14	.53736
14.05	.9919	3720	35.27	.55199
0	.9856	2940	37.00	.56437

m-Toluidine (C_7H_9N) + Butyric acid ($C_4H_8O_2$)

Angelescu and Eustatin, 1936

mol %	d	η	σ	n_D
25°				
100	0.9545	1370	27.76	1.39807
91.11	.9708	2780	26.89	.42217
82.82	.9852	5030	27.39	.44141
73.50	.9903	7550	28.09	.46101
63.73	.9934	8510	28.91	.47918
54.11	.9940	8060	29.91	.49424
43.63	.9931	6710	30.65	.50987
33.44	.9909	5590	32.44	.52438
22.78	.9894	4600	33.65	.53894
12.28	.9871	3640	37.18	.55293
0	.9856	2940	37.00	.56437

p-Toluidine (C_7H_9N) + Acetic acid ($C_2H_4O_2$)

O'Connor, 1921

mol %	f. t.	mol %	f. t.
B			
100	16.6	88.9	6.1
94.3	12.6	86.8	+2.0
91.5	10.1	85.4	-3.1
(1+2)			
90.3	0.6	67.4	47.8
87.7	13.3	65.1	48.0
87.0	17.5	60.9	47.6
85.2	25.0	55.9	46.6
82.8	32.8	52.1	44.8
81.5	36.8	46.8	41.8
77.2	42.2	39.1	36.0
74.9	44.6	32.8	30.7
70.7	46.8	28.5	25.7
A			
50.7	10.2	24.0	31.3
45.7	16.7	19.0	33.7
42.3	20.2	12.5	37.0
33.8	26.0	6.7	39.8
30.4	27.9	0	43.0

Kremann, Weber and Zechner, 1925

%	f. t.	%	f. t.
17°			
93.6	13.5	33.8	4
89.6	11.5	31.4	12
86.1	8.5	28.2	18
82.9	6.0	25	23
79.6	3.0	21.4	26.5
76.3	2.8	16.9	31
74.2	-	11.8	35.5
74.5	- 9	9.3	37
69.9	-12.8	6.4	39
66.9	-	0	44

Lucasse, Koob and Miller, 1944

mol %	f. t.	mol %	f. t.
0	43.8	69.5	48.9
14.0	36.4	72.5	48.0
22.2	32.8	77.1	44.4
28.3	30.8	79.9	40.7
31.1	29.7	82.7	35.3
32.8	27.2	85.5	26.5
33.9	32.3	87.3	18.7
39.2	36.8	88.3	16.0
39.2	37.2	88.8	11.0
45.7	41.6	89.7	6.2
51.1	45.2	90.2	7.3
57.3	47.6	90.2	7.5
63.9	49.1	90.6	8.0
66.5	49.0	90.6	8.3
67.0	49.2	91.3	9.1
67.5	49.1	91.6	9.5
92.2	10.0	94.3	12.5
92.9	11.0	100	16.7
E : 30.2 mol %	28.6	(1+2)	
89.7 mol %	6.4		

p-Toluidine (C_7H_9N) + Trichloroacetic acid ($C_2HO_2Cl_3$)

Kitran, 1924

mol %	f. t.
35	32.7 E
66.7	84.0 (1+2)
85	18.2 E

p-Toluidine (C_7H_9N) + Benzoic acid ($C_7H_6O_2$)
Vignon, 1891

mol %	f. t.	mol %	f. t.
0	45	66.67	85
33.33	47	100	121
50	55		

Baskov, 1913

mol %	f. t.	E	min	tr. t.	min
0	43.5	-	6.2	-	-
10	38.0	28.0	19.8	-	-
15	36.0	28.5	100.0	-	-
23	31.5	29.0	165.9	-	-
30	-	29.0	94.8	-	-
35	39.0	29.0	68.4	-	-
40	47.0	28.0	33.1	-	-
46	51.0	27.0	12.1	-	-
48	52.0	28.0	-	-	71.0
50	52.5	-	-	52.5	63.1
52	53.5	-	-	-	59.3
53.3	59.0	-	-	52.5	49.2
56	63.5	-	-	53.0	44.6
60	70.0	-	-	52.0	32.1
70	90.5	-	-	52.5	18.1
80	104.0	-	-	50.0	11.2
90	112.5	-	-	45	-
100	121.4	-	-	-	-

Kremann, Weber and Zechner, 1925			
%	f. t.	%	f. t.
100	121	47.4	50.1
88.9	112	44.9	49.5
84.0	106.5	44.2	48.1
79.8	102	42.1	46.0
74.5	95.5	41.2	46.0
69.9	87.5	39.9	44.5
66.8	80.0	35.6	40.1
62.9	71.0	28.0	33.0
60.2	65.0	23.2	29.5
56.9	56.4	15.0	35.1
55.4	54.0	12.2	37.1
53.9	52.1	4.4	40.8
51.1	51.8	0	44.0
E : 56 %	52°		
25 %	28°	(1+1)	
Bartholomew and Work, 1926			
mol %	f. t.	mol %	f. t.
100	122	40	43
80	101	37.5	38
76	97	33.3	33
70	88	29.5	28
60	67	28.0	23
57.2	58	25.0	26.5
54	48	20.0	29
50	50	11.2	35
45	45	0	43
		(1+1)	
Baskov, 1913			
%	50°	70°	75°
0	-	-	-
11.24	0.002062	0.002527	-
16.75	.003588	.003981	-
22.17	.009662	.007771	-
27.53	-	-	0.01447
32.81	-	-	.02672
41.13	-	-	.06181
43.17	0.1215	-	-
45.21	-	-	0.08993
48.25	-	-	.1282
49.26	0.4081	0.1745	-
51.27	-	.1873	-
53.26	-	.2597	0.1869
54.26	-	.2410	.1873
55.25	-	.2809	.2002
56.73	-	.3610	.2222
58.22	-	-	.2500
60.17	-	-	.2565
61.15	-	-	.2581
63.10	-	-	.2667
64.06	-	-	.2345
65.03	-	-	.1945

%	125°	140°
0	-	0.000625
11.24	-	.001773
16.75	-	.003232
22.17	-	.005738
27.53	0.007630	.01062
32.81	.01275	.01842
41.13	.02656	.03527
43.17	.03103	.03876
45.21	.03129	.04984
48.25	.03702	.08210
49.26	.03981	.07118
51.27	.04524	.08045
53.26	.04991	.08224
54.26	.05269	.08596
55.25	.06127	.1251
56.25	-	.1072
56.73	0.06506	.1441
58.22	.06116	.1413
60.17	.05814	.1130
61.15	.05834	.1342
63.10	.05618	.1062
64.06	-	.1155
65.03	0.05325	.1098
69.83	.05030	.09596
77.37	.03393	.05274
82.01	.02501	-
91.12	.008688	-
95.59	.000100	-
100	-	-

t	50 mol %	60 mol %
75	0.1824	0.2621
80	.1647	.2252
85	.1406	.2000
90	.1210	.1590
95	.09933	.1319
100	.08631	.1150
105	.07653	.09653
110	.06921	.08795
115	.06236	.07960
120	.05873	.07349
125	.05532	.06891
130	.05421	.06512
135	.05313	.06381

p-Toluidine (C₇H₉N) + Cinnamic acid (C₉H₈O₂)

Kremann, Weber and Zechner, 1925			
%	f. t.	E	
0.0	44	-	
5.9	41	-	
14.9	38	-	
23.4	34	-	
30.7	30	23	
36.6	27	23	
45.3	23	-	
52.0	56	23	
60.4	84	23	
68.3	98	-	
85.5	118	-	
93.0	126	-	
100.0	133	-	

p-Toluidine (C_7H_9N) + Salicylic acid ($C_7H_6O_3$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
96	155	-
95.5	151	-
82.4	128	82
71.7	102	82
66.4	90	-
63.8	82	-
61	83.2	-
60.5	83.5	-
55.3	84.5	-
51.1	82	-
50.8	82	-
46.6	76	-
39	67	-
32.5	57	-
27.9	46	31
20.2	34.8	31
11.7	39	-
7.1	41	-
0	44	-

(1+1)

Bartholomew and Work, 1926

mol %	f.t.	mol %	f.t.
100	158	32	63
80	135	30	60
75	127	27.5	54
70	119	25	46
66.7	109	22	41
61.6	84	20	36
60	70	18	29
53.4	78	14.3	33
50	80	10	35
44.5	81	5	38
40	77.5	0	43
33.3	64		

(1+1)

Benzylamine (C_7H_9N) + Formic acid (CH_2O_2)

Bastitch and Pushin, 1947

mol %	f.t.
100	
90	7.7
66.7	- 9
65	9
60	20
55	55
50	68.5
40	81
33.3	71.5
20	61.5
10	50
	33.2

(1+1)

Ethylbenzylamine ($C_{15}H_{17}N$) + Acetic acid
($C_2H_4O_2$)

Pushin and Tutundzic, 1933

mol %	18°	40°
40.8	-	0.002
51.3	0.016	0.012
61.0	0.147	0.114
70.8	0.799	0.824
80.5	2.986	3.906
85.1	5.013	7.017
90.0	7.669	10.78
91.8	8.385	11.73
92.9	8.625	11.98
94.0	8.406	11.57
94.06	8.363	11.47
95.0	7.816	10.68
97.0	4.743	6.129
98.5	1.512	2.190

Diphenylamine ($C_{12}H_{11}N$) + Formic acid (CH_2O_2)

Bastitch and Pushin, 1947

mol %	sat.t.	f.t.	m.t.	E
100	-	7.7	-	-
95	-	9	0	1.2
90	-	35	33.5	-1
80	-	41.5	-	-2
70	48	-	45	-
60	87	-	44	-3
50	93	-	39	-
40	90	-	42	-
33.3	69	-	45	-
30	-	47	47	-
25	-	-	48	-
20	-	-	49.2	-
10	-	52	51.5	-
0	-	-	54	-

Diphenylamine ($C_{12}H_{11}N$) + Propionic acid
($C_3H_6O_2$)

Starobinets, Pamfilov and al., 1948

mol %	f.t.	$\sigma_1 - \sigma$ (54°)
0	53.4	-
5.36	51.65	1.3
10.10	50.05	2.2
14.40=	49.05	3.2
18.40	48.10	4.2
25.30	45.75	5.2
31.20	43.50	6.5
40.30	40.85	8.2
47.50	38.15	10.3

Diphenylamine ($C_{12}H_{11}N$) + Butyric acid
($C_4H_8O_2$)

Starobinets, Pamfilov and al., 1948

mol %	f.t.	$\sigma_1 - \sigma$ (54°)
0	53.4	-
2.67	52.5	-
6.18	51.5	-
8.41	50.8	-
10.0	50.3	2.6
20.0	47.8	5.2
30.0	45.0	7.3
40.0	41.8	9.0
50.0	37.8	10.7
60.0	33.2	11.7
70.0	28.0	12.6
80.0	16.9	13.9

Deviatikh and Pamfilov, 1949

%	f.t.	%	f.t.
0	53.4	50	39.6
10	50.9	60	35.6
20	47.8	70	29.8
30	45.0	80	21.8
40	42.6	90	1.1

Diphenylamine ($C_{12}H_{11}N$) + Isovaleric acid
($C_5H_{10}O_2$)

Starobinets, Pamfilov and al., 1948

mol %	f.t.	$\sigma_1 - \sigma$ (54°)
0	53.4	-
3.77	52.0	1.7
7.26	50.7	3.2
10.52	50.2	5.5
13.55	49.9	6.4
16.38	48.7	7.1
21.52	47.5	8.3
28.09	46.8	10.5
38.53	41.9	11.2

Deviatikh and Pamfilov, 1949

%	f.t.	%	f.t.
0	53.4	50	38.8
10	50.3	60	33.2
20	47.8	70	28.0
30	45.0	80	16.9
40	41.8	90	- 4.1

Diphenylamine ($C_{12}H_{11}N$) + Isocaproic acid
($C_6H_{12}O_2$)

Starobinets, Pamfilov and al., 1948

mol %	f.t.	$\sigma_1 - \sigma$ (54°)
0	53.4	-
6.35	51.6	4.2
11.88	49.4	5.5
16.83	48.6	6.7
21.25	47.1	7.2
25.22	45.7	7.7
28.21	44.6	8.2
32.07	43.9	8.4
35.05	43.2	8.6

Diphenylamine ($C_{12}H_{11}N$) + Stearic acid
($C_{18}H_{36}O_2$)

Eykman, 1889

%	D f.t.	%	D f.t.
2.305	-0.59	11.94	-2.81
4.044	-1.01	15.98	-3.65
5.803	-1.43	21.9	-4.78
8.382	-2.02		

Diphenylamine ($C_{12}H_{11}N$) + Oleic acid
($C_{18}H_{34}O_2$)

Starobinets, Pamfilov and al., 1948

mol %	f.t.	$\sigma_1 - \sigma$ (54°)
0	53.4	-
1.54	52.7	4.0
2.46	52.3	5.1
3.88	52.1	6.0
5.80	51.2	6.4
14.50	49.5	8.1
27.20	46.4	9.3

Diphenylamine ($C_{12}H_{11}N$) + Trichloroacetic acid
($C_2H_2Cl_3$)

Kitran, 1924

mol %	f.t.
5	51.3 E
33.4	114.2 (2+1)
85	19.6 E

Diphenylamine ($C_{12}H_{11}N$) + Benzoic acid
($C_7H_6O_2$)

Baskov, 1914

mol %	f.t.	E	min
0	53.2	-	-
4	51.8	49.9	21.8
8	-	50.6	84.6
15	59.9	49.1	62.8
30	73.0	49.2	52.0
40	78.9	49.2	51.2
50	87.9	48.9	25.8
60	97.4	47.9	20.0
75	107.4	49.7	6.9
100	121.4	-	-

Pushin and Wilowitsch, 1925 (fig.)

mol %	f.t.	mol %	f.t.
100	121	40	77
90	113	30	68
80	107	20	59
70	100	10	50 E
60	94	0	55
50	86		

Benzidine ($C_{12}H_{12}N_2$) + Formic acid (CH_2O_2)

Bastitch and Pushin, 1947

mol%	f.t.	E
100	7.7	-
95	5	-9
94	104	-
50	223	-
45	221	-
33.3	181	101
25	145	105
20	113	107
10	118	-
0	128	-

Benzidine ($C_{12}H_{12}N_2$) + Melanin acid

Adler, 1932

%	f.t.	%	f.t.
0	128	40	117.5
10	117.5	50	117
20	117.5	60	117.5
30	117.5	70	117.5

Benzidine ($C_{12}H_{12}N_2$) + Sepiamelanin acid

Adler, 1932

%	f.t.
0	128
10-50	122

Benzidine ($C_{12}H_{12}N_2$) + Sarcomelanin acid

Adler, 1932

%	f.t.
0	128
10-50	122

Benzidine ($C_{12}H_{12}N_2$) + Aminobenzoic acid .
Melanin acid

Adler, 1932

%	f.t.
0	128
10-50	120

Benzidine ($C_{12}H_{12}N_2$) + Humic acid

Adler, 1932

%	f.t.	%	f.t.
0	128	40	122
10	123	50	121.5
20	122.5	60	122
30	122	70	122

1-NAPHTHYLAMINE + FORMIC ACID

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α -Naphthylamine ($C_{10}H_9N$) + Formic acid
(CH_2O_2)

Bastitch and Pushin, 1947

mol%	f. t.	E
100	7.7	-
97	3	- 6.5
90	14	-10
80	60	-
70	89	-
66.7	98.5	-
60	116	-
55	124	-
50	127	-
45	120	-
40	110.5	-
30	86.5	35.2
20	34.9	34.9
10	41.5	36.2
0	48.5	-

(1+1)

α -Naphthylamine ($C_{10}H_9N$) + Acetic acid
($C_2H_4O_2$)

Kremann, Weber and Zechner , 1925

%	f. t.	E
0.0	49	-
5.1	43	-
10.5	35	-
12.8	31	-
15.9	28	-
22.9	17	-
28.8	6.5	-
29.7	7	-31
33.6	1	-31
33.9	0	-
38.0	- 8	-
38.3	- 8	-
42.5	-15	-31
44.2	-18	-
46.6	-22	-
49.2	-28	-
54.2	-27	-
51.8	-22	-
55.4	-22	-31
57.5	-20	-31
57.9	-18	-
60.5	-14	-
61.4	-11	-
64.8	- 6	-31
70.8	+ 2.5	-31
75.5	5	-
77.8	7	-
82.5	10.0	-
91.1	14	-
96.3	15.5	-
100.0	17	-

%	f. t.	%	f. t.
0.0	49.0	37.0	- 5.0
7.7	38.5	59.3	-18
8.2	37.8	62.3	-11.8
10.3	35.5	66.0	- 4
14.0	30.9	69.3	+ 0.2
16.2	28.6	72.4	4.2
19.4	24.0	76.3	7
22.0	20.0	81.5	10.3
24.9	15.5	86.1	12.0
28.6	11.0	92.7	14.0
31.4	6.0	97.1	15.6
34.1	0.0	100.0	17.0

α -Naphthylamine ($C_{10}H_9N$) + Succinic acid
($C_4H_6O_4$)

Kremann, Weber and Zechner, 1925

%	f. t.	E
0.0	49	-
2.0	46	44
3.6	70	-
5.4	85	-
5.4	83	44
9.6	106	-
12.9	116	-
15.3	120	-
20.6	130	-
28.8	137	-
36.2	143	-
57.1	153	-
70.8	162	-
72.5	167	-
81.1	170	-
91.1	179	-
100	183	-

α -Naphthylamine ($C_{10}H_9N$) + Benzoic acid
($C_7H_6O_2$)

Baskov, 1914

mol %	f. t.	E	min
0	48.2	-	-
6.0	44.5	28.0	10.3
13.4	39.5	33.8	30.4
23.9	-	34.2	69.2
27.0	38.5	34.1	83.5
31.7	51.0	32.0	77.7
36.0	58.0	32.5	68.8
40.0	65.5	34.0	56.9
50.0	81.0	31.5	40.0
60.0	90.5	28.5	25.4
80.0	106.0	18.0	16.0
100	121.4	-	-

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1-NAPHTHYLAMINE + CINNAMIC ACID

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	49	-
7.4	44	-
14.7	39	-
14.9	39	33
19.1	35	-
22.2	36	33
23.4	37	33
29.4	52	-
35.6	63	-
39.4	68.5	-
48.6	82	33
51.4	85.4	-
55.2	89	-
57.8	91	-
64.3	96.5	-
66.6	99	-
67.8	102.3	-
75.3	105.5	-
79.1	108	-
84.0	111.5	-
88.2	114	-
97.1	119	-
100.0	121	-

Milone and Rossignoli, 1932 (fig.)

%	f.t.	%	f.t.
0	49.5	50	83
10	43	60	95
20	34	70	105
21.5	33 E	80	112
30	55	90	117.5
40	72.5	100	122

Baskov, 1914

mol %	87°	100°	100° (3 h. heating)	125°
0	-	0.003675	-	-
40	0.003846	.005485	0.01036	0.02500
48	.005330	.007473	-	-
50	.005636	.007704	.02724	.07352
52	.005248	.006983	-	-
60	.003272	.004750	.008084	.01555
100		very low		

Milone and Rossignoli, 1932 (fig)

%	Q comb (cal/g)	%	Q comb (cal/g)
0	8837	40	7371
90	8577	30	7103
80	8324	20	6840
70	8115	10	6582
60	7857	100	6324
50	7604		

 α -Naphthylamine (C₁₀H₉N) + Cinnamic acid (C₉H₈O₂)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	49.0	-
6.9	43.5	-
10.7	40	34
23.7	44.7	34
25.9	53.1	-
30.6	63	34
36.2	71	34
44.7	86	-
51.1	94	-
60.4	103.5	-
68.3	110	-
73.8	114	-
80.9	119	-
85.6	122.5	-
100	133	-

 α -Naphthylamine (C₁₀H₉N) + Salicylic acid (C₇H₆O₃)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0.0	49	-
7.4	38	-
13.3	52	-
22.6	73	38
25.8	77	-
27.7	78	-
29.0	78.5	-
31.2	80	-
34.5	81	-
36.5	82	-
37.3	83	-
39.1	83	-
41.1	88.5	-
42.4	97	-
42.7	96	82-83
47.1	108	-
48.4	110	-
53.3	119	-
53.3	117	-
60.3	125	-
61.7	126	-
70.8	137	82-83
81.6	146	-
92.5	152.5	-
100.0	155	-

(2+1)

Milone and Rossignoli, 1932

%	Q comb (cal/g)	%	Q comb (cal/g)
0	8837	60	6685
10	8465	70	6323
15	8637	80	5959
30	7738	90	5600
40	7403	100	5232
50	7044		

β -Naphthylamine ($C_{10}H_9N$) + Formic acid
(CH_2O_2)

Bastitch and Pushin, 1947

mol%	f.t.	E
100	7.7	-
90	- 8.5	-14
80	3.5	-10
66.7	83	-
60	105	-
55	113	-
45	111	-
40	100.8	-
33.3	73	-
30	70	67.5
20	87	-
10	100	64.5
0	110 (1+1)	-

β -Naphthylamine ($C_{10}H_9N$) + Acetic acid
($C_2H_4O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	E
0	110	-
7.1	105	-
10.2	102	-
11.0	100.5	-
16.7	94	-
19.9	90	-
20.7	91	-
25.8	84	-
30.9	77	- 7
33.7	76	-
35.6	72	- 7
40.7	65.5	-
44.2	62	-
44.9	59	- 7
49.9	53	-
51.8	51	-
52.3	46	-
56.6	42.5	-
59.9	26	- 7
61.4	30	-
64.8	+13	-
70.5	- 2.5	- 7
73.7	+ 1.5	-
74.5	7	-
79.8	6	-
83.0	8.8	-
85.5	9.8	-
90.5	12.7	-
91.7	13	-
94.8	14.5	-
95.8	15	-
100.0	17	-

β -Naphthylamine ($C_{10}H_9N$) + Propionic acid
($C_3H_6O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
100	-20	46.3	64
97.1	-21.5	39.1	73
91.5	-23	34.7	77.0
84.7	-25	30.1	82.5
77.5	-18	26.6	86
69.6	+20	21.8	90.5
65.8	34	16.3	96
62.3	41	10	101
57.7	49	5.3	106
51.8	58	0	110
E : 80 %	-27°		

β -Naphthylamine ($C_{10}H_9N$) + Succinic acid
($C_4H_6O_4$)

Kremann, Weber and Zechner, 1925

%	f.t.	%	f.t.
0.0	111	50.9	147
8.1	110	53.3	151
13.6	109	58.0	158
18.6	108	63.7	163.5
25.4	124	68.7	168
30.7	129	74.4	173.0
35.7	131	82.0	177
41.1	133	90.8	181
45.0	133.5	93.4	182.5
48.0	142.5	100.0	183
49.1	145		
E : 19 %	108°		

β -Naphthylamine ($C_{10}H_9N$) + Trichloroacetic acid
(C_2HCl_3)

Kitran, 1924

mol %	f.t.
35	98.6 E
50	- (1+1)
88	15.0 E

β -Naphthylamine ($C_{10}H_9N$) + Benzoic acid
($C_7H_6O_2$)

Baskov, 1914

mol %	f.t.	E	min
0	111.5	-	-
15	100.8	77.5	-
21	97.7	76.3	8.1
25	95.0	76.8	-
35	87.3	73.3	21.4
42	82.5	78.5	39.4
48	79.0	78.7	64.1
50	-	78.5	61.5
52	60.0	78.7	51.7
56	84.0	76.5	-
60	88.5	76.0	33.9
66	94.5	76.5	26.1
70	98.5	76.0	20.8
78	105.0	75.0	16.8
100	121.4	-	-

Kremann, Weber and Zechner, 1925

%	f.t.	E	%	f.t.	E
0	110	-	54.1	88	-
9.8	105	-	62.7	96.5	78.2
21.1	98	78.2	73.2	105	-
28.8	91.5	-	81.7	111	-
35.8	85.5	-	90.2	116.5	-
43.1	80.0	78.2	100.0	121	-
49.9	84	-			

Baskov, 1914

mol %	87°	100°	mol %	87°	100°
0	-	0.00715	50	0.01133	0.01451
25	-	0.01008	52	0.00919	0.01158
35	-	0.01317	56	-	0.00766
42	-	0.01509	100	-	very low
48	0.00954	0.01561			

β -Naphthylamine ($C_{10}H_9N$) + Cinnamic acid
($C_9H_8O_2$)

Kremann, Weber and Zechner, 1925

%	f.t.	E	%	f.t.	E
0.0	110.5	-	44.5	82	-
4.1	109	-	50.2	85	-
7.9	107	-	50.5	89	-
11.8	105	-	51.4	90	-
13.1	104	82	54.4	94	82
19.6	100	-	58.3	98.5	-
24.6	97	82	64.1	104	-
30.3	92	-	70.3	110	-
33.4	91	-	76.5	115	-
35.2	89	82	84.4	121	-
40.5	84	82	89.3	125.5	-
43.4	83	82	100.0	133	-

β -Naphthylamine ($C_{10}H_9N$) + Salicylic acid
($C_7H_6O_3$)

Kremann, Weber and Zechner, 1925

%	f.t.	E	%	f.t.	E
0.0	110	-	52.2	101	96
8.5	105	-	54.8	108	96
18.3	99	-	61.8	121.5	-
25.5	93.5	91	65.1	127	96
30.5	91	-	69.9	134	-
36.4	92.5	-	69.7	133	-
41.2	94	-	76.5	140	-
45.0	95.5	-	84.4	147	-
47.3	95.5	-	92.4	152	-
49.2	96	-	100.0	155	-
50.3	96	-			

(1+1)

Milone and Rossignoli, 1932

%	f.t.	%	f.t.
0	108	50	96.0 tr.t.
10	104	60	117
20	97.5	70	132
30	91.5	80	143
32.5	89.5 E	90	152
40	93	100	155

%	Q comb (cal/g)	%	Q comb (cal/g)
0	8828	60	6697
10	8466	70	6332
20	8104	80	5982
30	7734	90	5607
40	7366	100	5232
49.11	7084		

Pyrrole (C_4H_5N) + Acetic acid ($C_2H_4O_2$)

Magnanini, 1889

%	f.t.	%	f.t.
100	16.44	92.0638	12.31
99.6321	16.22	85.8021	9.54
99.4153	16.10	81.1006	7.65
98.8795	15.80	63.7715	1.60

Dezelic and Belia, 1938

mol %	d	η	mol %	d	η
20°					
0	0.9481	1300	60	1.0126	1357
20	0.9750	1296	80	1.0303	1415
40	0.9923	1304	99	1.0530	1479

Dezelic, 1937

Concave viscosity curve and no heat of mixing .

Pyrrole (C ₄ H ₅ N) + Propionic acid (C ₃ H ₆ O ₂)						N-Ethylpyrrole (C ₆ H ₉ N) + Acetic acid (C ₂ H ₄ O ₂)					
Dezelic and Belia, 1938						Magnanini, 1889					
mol %		d	η	mol %		d		η			
20°											
0	0.9481	1300		40	0.9604	1251					
10	0.9482	1289		60	0.9723	1235					
20	0.9484	1276		80	0.9835	1194					
30	0.9548	1263		100	0.9929	1107					
Pyrrole (C ₄ H ₅ N) + Butyric acid (C ₄ H ₈ O ₂)						2,4-Dimethylpyrrole (C ₆ H ₉ N) + Propionic acid (C ₃ H ₆ O ₂)					
Dezelic and Belia, 1938 and Dezelic, 1937						Dezelic and Belia, 1938					
mol %		d	η	mol %		d		η			
20°						20°					
0	0.9481	1300		70	0.9557	1599					
20	0.9481	1369		80	0.9560	1610					
40	0.9488	1464		100	0.9594	1616					
60	0.9532	1551									
2,4-Dimethyl-3-ethylpyrrole (C ₈ H ₁₃ N) + Propionic acid (C ₃ H ₆ O ₂)						Piperidine (C ₅ H ₁₁ N) + Formic acid (CH ₂ O ₂)					
Dezelic and Belia, 1938						Babak , Airapetova and Udoenko, 1950					
mol %		d	η	mol %		d		η			
20°						25° 50° 75°					
0	0.9142	14050		70	0.9505	4449.6					
30	0.9248	10210		100	0.9929	1107					
50	0.9322	6952									
2,4-Dimethyl-3-ethylpyrrole (C ₈ H ₁₃ N) + Butyric acid (C ₄ H ₈ O ₂)						Piperidine (C ₅ H ₁₁ N) + Formic acid (CH ₂ O ₂)					
Dezelic and Belia, 1938						Babak , Airapetova and Udoenko, 1950					
mol %		d	η	mol %		d		η			
20°						25° 50° 75°					
0	0.9142	14050		70	0.9353	4920					
30	0.9188	9620		100	0.9577	1620					
50	0.9247	7210									
N-Methylpyrrole (C ₅ H ₇ N) + Acetic acid (C ₂ H ₄ O ₂)						N-Ethylpyrrole (C ₆ H ₉ N) + Acetic acid (C ₂ H ₄ O ₂)					
Magnanini, 1889						Magnanini, 1889					
%		f.t.		%		f.t.		%		f.t.	
100		16.44		91.9857		13.11		100		16.44	
99.1679		16.04		91.1868		12.83		99.7523		16.34	
98.1261		15.57		80.9994		9.62		98.8818		15.99	
95.4754		14.47		78.3414		8.89		96.3542		15.04	

Piperidine ($C_5H_{11}N$) + Acetic acid ($C_2H_4O_2$)

Pushin and Rikovski, 1932

mol %	f.t.	mol %	f.t.
0	- 11	60	81
5	+ 57	66.7	35
15	79	70	+ 5
30	94	85	-11
45	103	90	0
50	105 (1+1)	100	+16.5
55	99.5		

Piperidine ($C_5H_{11}N$) + Propionic acid ($C_3H_6O_2$)

Prideaux and Coleman, 1936 (fig.)

%	d	%	d
25°			
0	0.868	60	1.028
20	0.938	70	1.028
40	1.002	80	1.022
50	1.024	100	0.984
%	σ	%	σ
25°			
0.0	29.83	46.5	36.58
15.7	30.69	51.7	35.83
30.1	32.82	57.3	34.75
38.6	34.70	72.7	31.40
43.7	36.11	100.0	26.06

Piperidine ($C_5H_{11}N$) + Butyric acid ($C_4H_8O_2$)

Prideaux and Coleman, 1936 (fig.)

%	d	%	d
25°			
0	0.868	60	1.000
20	0.922	70	0.998
40	0.980	80	0.990
50	1.000	100	0.955
%	σ	%	σ
25°			
0	29.83	50.8	34.39
16.9	30.50	60.0	32.90
30.0	31.86	70.2	31.04
41.5	33.27	87.1	28.17
46.0	34.06	100.0	26.21
48.9	34.39		

Piperidine ($C_5H_{11}N$) + Isobutyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	20°	50°	mol %	20°	50°
0	1.4528	1.4368	49.62	1.4656	1.4540
14.71	.4567	.4421	52.27	.4642	.4530
25.06	.4602	.4464	61.44	.4548	.4442
34.33	.4632	.4508	71.94	.4412	.4308
44.52	.4658	.4541	81.58	.4267	.4155
46.98	.4660	.4543	100	.3928	.3798

Piperidine ($C_5H_{11}N$) + Isovaleric acid ($C_5H_{10}O_2$)

Prideaux and Coleman, 1936 (fig.)

%	σ	%	σ
25°			
0.0	29.83	53.9	31.68
15.1	30.19	54.5	31.67
30.0	30.80	65.3	29.75
40.3	31.25	77.4	27.76
48.1	31.82	89.2	26.08
51.6	31.94	100.0	24.90
%	d	%	d
25°			
0	0.868	60	0.978
20	0.912	70	0.976
40	0.958	80	0.965
50	0.976	100	0.925

Matavulj and Hojman, 1939

mol %	20°	n_D	50°	mol %	20°	n_D	50°
0	1.4525	1.4368	49.88	1.4644	1.4528		
14.89	.4571	.4425	54.63	.4614	.4503		
25.52	.4605	.4474	62.96	.4530	.4427		
35.13	.4632	.4510	72.21	.4428	.4321		
44.75	.4649	.4532	84.29	.4273	.4160		
46.80	.4650	.4533	100	.4031	.3902		

Piperidine ($C_5H_{11}N$) + Caproic acid ($C_6H_{12}O_2$)

Prideaux and Coleman, 1936

%	σ	%	σ
25°			
0	29.83	54.7	32.10
20.5	30.50	57.7	31.75
29.6	30.83	68.2	30.30
37.6	31.21	78.1	28.91
45.1	31.55	87.7	28.21
50.1	32.06	100.0	27.49

Piperidine (C ₅ H ₁₁ N) + Heptanoic acid (C ₇ H ₁₄ O ₂)			
Prideaux and Coleman, 1936			
%	d	%	d
0	0.868	25° 60	0.970
20	0.910	70	0.965
40	0.945	80	0.955
50	0.965	100	0.923
mol %	κ	mol %	κ
13.4	0.16	62.0	3.39
22.5	1.33	68.7	3.66
31.8	4.40	76.2	3.75
42.3	4.13	78.8	3.45
50.0	3.17	83.7	1.63
57.2	3.17		
mol %	η	mol %	η
0.0	2200	25° 57.6	61800
32.3	20400	61.4	22100
45.2	71100	66.7	80500
48.6	41400	70.5	55100
50.0	58600	78.3	26200
51.7	78500	100.0	2800
53.7	83300		
Piperidine (C ₅ H ₁₁ N) + Caprylic acid (C ₈ H ₁₆ O ₂)			
Prideaux and Coleman, 1936			
%	d	%	d
0	0.868	25° 60	0.958
20	0.900	70	0.955
40	0.935	80	0.948
50	0.948	100	0.915
%	σ	%	σ
0	29.83	25° 56.5	31.29
13.1	30.05	58.4	31.12
24.5	30.26	60.4	30.82
34.5	30.50	64.5	29.70
44.5	30.84	80.7	28.60
49.1	31.03	89.8	28.19
54.0	31.23	100.0	27.97
Pyridine (C ₅ H ₅ N) + Formic acid (CH ₂ O ₂)			
Lecat, 1949			
%	b. t.		
0	115.4		
18	148.8 Az		
100	100.75		
P.P. and N.S. Kosakewitsh, 1933			
mol %	d	mol %	d
	14°		
0	0.984	77.95	1.211
3.55	0.992	87.49	1.216
13.62	1.006	93.11	1.226
30.87	1.036	97.04	1.229
55.71	1.113	99.04	1.227
63.86	1.149	100.0	1.226
69.90	1.178		
Udoenko and Airapetova, 1947			
mol %	d		
	0°	25°	50°
100.00	1.2375	1.2088	1.1846
96.05	-	-	-
93.81	.2394	.2134	.1897
88.59	.2359	.2138	.1912
82.43	.2273	.2042	.1847
77.62	.2185	.1973	.1730
74.78	.2097	.1876	.1647
70.65	.1909	.1680	.1456
64.38	.1669	.1418	.1207
52.54	.1118	.0912	.0701
44.26	.0870	.0629	.0394
30.41	.0486	.0228	.0016
16.05	.0198	0.9968	0.9744
0.00	0.9979	.9756	.9500
mol %	η		
	0°	25°	50°
100.00	2821.0	1537.2	976.7
93.81	5156.1	2656.7	1616.4
88.59	7669.9	3778.4	2191.6
82.43	11831.9	5312.4	2872.7
77.62	14940.7	6161.0	3202.1
74.78	14967.2	6130.5	3142.8
70.65	13065.0	5476.4	2846.3
64.38	9255.2	4254.7	2347.4
52.54	4403.6	2414.1	1514.5
44.26	2952.0	1782.7	1153.9
30.41	1901.9	1234.8	841.1
16.05	1503.0	992.1	701.8
0.00	1317.5	885.0	624.8

P.P. and N.S. Kosakewitsh, 1933

mol %	σ	mol %	σ
14°			
0	37.88	77.95	47.72
3.55	38.21	87.49	46.60
13.62	38.57	93.11	43.23
30.87	39.31	97.04	40.84
55.71	43.12	99.04	39.26
63.86	44.94	100.0	37.21
69.90	46.75		

Pushin, Matavulj and al., 1940-1946

%	mol %	n_D
20°		
100	0	1.3714
98.4	10	.4101
70	20	.4414
63.6	25	.4510
57.6	30	.4598
54.5	33.3	.4657
46.6	40	.4701
36.9	50	.4770
28	60	.4818
20	70	.4882
16.3	75	.4910
12.7	80	.4928
6	90	.4989
0	100	.5097

Udovenko and Airapetova, 1947

mol %	κ		
	0°	25°	50°
100	0.7	1.3	1.8
96.05	266.0	460.6	682.6
93.81	336.3	591.4	896.8
88.59	320.6	653.6	1017.5
82.43	283.0	561.2	918.4
77.62	236.2	497.3	837.3
74.78	232.0	488.4	822.2
70.65	237.7	480.6	784.1
64.38	231.2	444.9	680.2
52.54	166.5	272.6	388.3
44.26	98.3	154.7	214.6
30.41	27.1	38.0	51.4
16.05	3.8	4.8	5.8
0.00	0.00003	0.00007	0.00008

Pyridine (C_5H_5N) + Acetic acid ($C_2H_4O_2$)

Heterogeneous equilibria .

von Zawidzki, 1900

L	%	V	P	P ₁	P ₂
80.05°					
0.0	0.0	238.9	238.9	-	
23.70	2.43	153.6	149.3	4.30	
32.05	6.52	123.5	114.9	8.61	
38.74	15.50	104.1	88.0	16.10	
42.82	24.90	94.6	71.8	22.7	
48.72	40.34	86.4	53.4	33.0	
55.87	58.70	84.6	37.6	47.0	
59.98	69.19	87.0	29.6	57.4	
60.86	70.80	88.9	28.9	60.0	
70.24	89.20	104.0	13.4	90.6	
78.64	96.74	128.2	5.2	123.0	
84.82	98.75	153.2	2.8	150.4	
88.52	99.17	169.6	1.8	167.8	
92.83	99.56	186.2	0.9	185.3	
95.73	99.67	196.7	0.8	195.9	
100	100	206.5	-	206.5	

Swearingen and Ross, 1935

L	%	V	b. c.
760 mm			
100.0	100.0	117.85	
92.3	99.2	122.30	
86.7	97.0	126.80	
81.4	92.0	130.15	
74.4	86.1	134.00	
66.8	76.0	136.95	
65.1	72.2	137.25	
62.0	66.5	138.05	
57.6	57.3	138.40	
56.2	54.4	138.35	
53.7	47.0	138.00	
49.3	37.6	137.20	
43.0	26.8	135.05	
32.2	14.0	130.70	
23.4	6.2	125.5	
13.8	2.5	120.55	
0.0	0.0	115.00	

Nelson and Markham, 1950 (fig.)

%		
L	V	b.t.
100	100	140
90	83	137
80	67	133
70	54	130
60	42	128
50	35	125
40	25	123
30	18	121
20	11	119
10	5	117
0	0	115

Swearingen and Ross, 1935

Az		
p	b.t.	mol %
760	138.25	58.4
760	138.20	"
760	125.00	"
800	139.85	"
570	129.40	58.9
380	117.50	59.5
190	99.50	60.2
120	87.10	60.8

Lecat, 1949

%		b.t.
0		115.4
35		139.7 Az
100		118.1

Zieborak and Zieborakova 1955

51.1 % b.t. = 138.1° Az

Swietoslawski and Kreglewski, 1954

mol %	crit.t.	mol %	crit.t.
0	345.00	56.5	344.85
11.6	347.70	67.1	341.85
16.4	348.35	78.2	337.50
31.3	348.35	88.3	330.60
39.3	348.10	100	321.30
47.3	346.70		

von Zawidski, 1906.

mol %	f.t.	mol %	f.t.
0	-42.0	90.65	+ 6.00
2.37	-43.2	91.87	8.15
6.46	-45.8	94.73	12.36
11.92	-50.3	96.28	13.88
50.28	-42.5	97.39	15.15
51.27	-43.5	98.97	15.90
87.10	- 1.30	100	16.54
87.76	0.0	(1+1)	

Pushin and Rikovski, 1932

mol %	f.t.	mol %	f.t.
0	-42	55	-48.5
5	-45	60	-52
10	-48	65	-56
15	-51.5	66.7	-54.5
20	-55	68	-52
25	-59	70	-48.5
30	-62	75	-35.5
35	-54.5	80	-22
45	-47	90	+ 4
50	-46 (1+1)	100	16.5

Swearingen and Ross, 1934

mol %	f.t.	mol %	f.t.
0.000	-43.5	77.722	-26.9
6.345	-47.1	78.698	-23.8
12.566	-50.6	79.734	-20.9
18.529	-55.3	80.771	-17.7
24.359	-62.3	81.543	-14.7
29.943	-67.5	82.221	-13.3
35.225	-57.4	82.669	-11.9
40.268	-51.6	83.720	- 9.2
45.440	-48.6	84.773	- 5.8
50.004	-48.2	85.234	- 4.5
54.890	-49.1	85.894	- 3.0
59.594	-52.3	86.470	- 0.6
63.927	-56.7	86.790	0.0
68.202	-52.9	88.568	+ 3.7
72.438	-47.5	90.710	6.6
74.790	-44.5	94.834	10.95
76.256	-31.8	(1+1) 100.000	16.3

Properties of phases .			
Patten, 1902 (fig.)			
%	d	%	d
25°			
100	1.0433	49.99	1.0342
95.18	.0464	36.33	.0150
83.18	.0535	21.94	0.9966
69.69	.0598	0	.9740
62.57	.0544		

Tsakalotos, 1908			
mol %	d	mol %	d
20°			
0	0.976	61.7	1.050
26.2	1.000	77.95	1.076
40.3	1.018	89.6	1.081
51.9	1.032	100	1.0514
59.9	1.046		

Faust, 1912				
mol %	d			
	18.4°	40°	70°	99°
0	0.9874	0.9661	0.9374	0.9064
50	1.0367	1.0164	.9847	.9589
80	.0784	.0594	1.0304	.9974
82.5	.0814	.0624	.0314	.9999
85	.0829	.0639	.0299	.9964
100	.0559	.0339	0.9989	.9639

Sakhanov, 1913			
%	d	%	d
25°			
100	1.046	86.78	1.055
99.459	.046	82.92	.058
99.015	.047	77.48	.061
96.977	.050	71.0	.064
91.03	.052	0	0.977

Worley, 1914			
t	d	t	d
0 vol %		25 vol %	
13	0.9882	17	1.0175
49	0.9545	52	0.9860
80	0.9062	76	0.9595
46 vol %		70 vol %	
12	1.0585	14	1.0871
47	1.0265	49	1.0537
75	0.9975	75	1.0230
100 vol %			
14.5	1.0553		
52	1.0162		
75	0.9913		

Mathews and Cook, 1914			
t	d	t	d
0		77%	55
25	1.10353	70	1.04299
40	1.07853		1.02549
	1.05941		

Faust, 1926			
50 mol % (22°) d= 1.0326			

Swearingen and Ross, 1935			
mol %	d	mol %	d
0.000	0.9720	78.698	1.0652
6.345	.9769	79.734	.0664
12.566	.9818	80.771	.0676
18.529	.9870	81.543	.0684
24.359	.9923	82.221	.0690
29.943	.9976	82.669	.0693
35.225	1.0032	83.720	.0700
40.268	.0089	84.773	.0704
45.440	.0149	85.234	.0707
50.004	.0209	85.894	.0711
54.890	.0273	86.470	.0711
59.594	.0345	86.790	.0716
63.927	.0415	88.568	.0700
68.202	.0487	90.710	.0676
72.438	.0588	94.834	.0583
74.790	.0595	100.000	.0380
77.722	.0640		

Venkatesan and Suryanarayana, 1956			
vol %	wt %	mol %	d
30°			
0	0	0	0.97301
10	10.59	13.50	.98544
20	21.05	25.99	.99669
30	31.37	37.56	1.00864
40	41.57	48.37	.02104
50	51.60	58.41	.03369
60	61.53	67.81	.04981
70	71.36	76.60	.06407
80	81.00	85.09	.07146
90	90.55	92.66	.06457
100	100	100	.03777

Tsakalotos, 1908				
%	η	%	η	
0	932.9	20° 61.7	3024	
26.2	1289	77.95	5037	
40.3	1762	89.6	4421	
51.9	2188	100	1286	
59.9	2885			
Faust, 1912				
mol %	η			
	18.4°	40°	70°	99°
0	1200	800	550	410
50	2830	1680	1000	750
80	5830	2910	1430	900
82.5	6130	2930	1450	880.5
85	6010	2850	1430	830
100	1350	1000	600	430
Sakhanov, 1913				
%	η	%	η	
100	1110	25° 86.78	3480	
99.459	1160	82.92	4000	
99.015	1220	77.48	3840	
96.977	1610	71.0	3790	
91.03	2780	0	889	
N	η	N	η	
1.022	2490	1.795	3520	
1.092	2580	2.597	3910	
1.248	2840	3.322	3800	
Mathews and Cook, 1914				
t	η	t	η	
0	12830	55	2070	
25	4870	70	1520	
40	2960			
Swearingen and Heck, 1934				
mol %	η			
	35°	45°	55°	
0	780	660	588	
20	1052	896	788	
40	1270	1070	920	
60	1928	1520	1265	
70	2550	1985	1580	
75	2887	2200	1755	
80	3170	2380	1860	
85	3200	2350	1820	
100	1012	853	746	

mol %	η		
	65°	75°	80°
0	535	484	465
20	682	620	583
40	780	710	670
60	1080	935	873
70	1305	1093	1000
75	1430	1175	1070
80	1500	1257	1115
100	660	582	540
Venkatesan and Suryanarayana, 1956			
%	η	%	η
	30°		
0	835.4	61.53	2704.0
10.59	984.2	71.36	3398.0
21.05	1139.0	81.00	3624.0
31.37	1346.0	90.55	2558.0
41.57	1648.0	100	1040.0
51.60	2075.0		
Worley, 1914			
%	σ	%	σ
0 vol %		25 vol %	
13	38.000	17	36.334
49	32.935	52	32.006
80	28.334	76	28.848
46 vol %		70 vol %	
12	35.577	14	33.281
47	31.886	49	29.826
75	28.780	75	27.247
100 vol %			
14.5	27.195		
52	23.618		
75	21.305		
Yajnik, Sharma and Bharadwaj, 1926			
vol %	σ		
	20°	40°	80°
0	37.22	34.32	28.32
10	36.52	34.27	28.32
20	36.02	33.71	28.31
30	35.20	33.01	28.08
40	34.58	33.67	28.02
50	33.95	32.15	27.78
60	33.08	31.45	27.37
70	32.15	30.65	26.79
80	31.68	29.61	25.37
90	29.68	27.49	23.52
100	26.71	24.75	20.80

Faust, 1926			
mol %		σ	
22°			
0		38.23	
50		35.80	
100		28.54	
vonZawidzki, 1900			
%		n_D	
0	1.50695	50.05	1.45277
4.62	.50170	60.07	.44335
10.21	.49523	70.24	.43312
20.30	.48399	79.80	.42051
30.40	.47284	90.35	.39891
40.40	.46235	100	.37015
Pushin and Matavulj, 1932			
mol %		n_D	
		10°	25°
0	1.5149	1.5064	1.4980
10.2	.5052	.4971	.4892
20.3	.4955	.4880	.4802
30.3	.4858	.4786	.4712
40.5	.4755	.4683	.4614
49.9	.4662	.4593	.4522
50.4	.4658	.4587	.4520
60.8	.4558	.4490	.4419
69.4	.4472	.4402	.4331
71.8	.4446	.4376	.4305
74.6	.4412	.4346	.4273
75.8	.4399	.4330	.4258
77.8	.4374	.4305	.4232
79.8	.4346	.4276	.4203
84.7	.4261	.4190	.4122
89.5	.4150	.4082	.4019
100	.3758	.3698	.3638
Venkatesan and Suryanarayana, 1956			
%		n_D	
		30°	
0	1.5040	61.53	1.4395
10.59	.4904	71.36	.4300
21.05	.4790	81.00	.4175
31.37	.4680	90.55	.3985
41.57	.4560	100	.3700
51.60	.4485		

Patten, 1902			
%		κ	
		25°	
100	0.0002	89.98	70.83
99.70	0.09567	89.78	71.95
99.43	0.2508	88.15	78.03
99.18	0.5303	86.76	82.81
98.86	0.9614	85.56	83.48
98.55	1.668	83.04	87.78
98.27	2.513	80.55	86.85
97.98	3.664	76.02	84.31
97.74	5.071	74.03	78.62
97.47	6.539	70.39	68.45
97.20	8.316	67.01	58.15
97.04	8.351	63.66	48.18
96.76	10.23	61.37	38.72
96.49	12.21	58.36	26.06
96.23	14.27	56.03	24.85
95.95	16.55	54.35	17.11
95.69	18.88	50.00	12.28
95.54	19.84	47.47	8.708
95.28	24.09	45.17	6.856
95.03	26.87	42.98	5.206
94.78	30.92	40.51	3.729
94.56	32.41	38.28	2.919
94.27	34.42	36.15	2.136
94.19	38.32	33.52	1.524
93.89	40.31	31.17	1.128
93.64	42.58	28.73	0.868
93.36	45.01	25.77	0.6083
93.14	46.95	23.43	0.4617
92.92	49.46	19.73	0.2981
92.68	51.64	16.56	0.2060
92.42	53.20	13.13	0.180
92.19	56.64	11.16	0.145
92.02	58.01	9.48	0.102
91.68	58.61	7.51	0.0613
91.43	60.22	5.50	0.0414
91.18	62.12	3.36	0.0253
90.99	63.83	1.14	0.01326
90.74	68.86	0	0.0002
Sakhanov, 1913			
N		λ	
3.322	2.14	0.209	0.51
2.597	2.81	0.160	0.38
1.795	3.55	0.0635	0.21
1.248	3.47	0.0262	0.18
1.093	3.28	0.0218	0.18
1.022	3.24	0.0136	0.18
0.658	2.32	0.00723	0.20
0.441	1.48	0.00595	0.25
0.312	0.94		
Trifonov and Cherbov, 1929			
mol %		κ	
		28°	50°
0	0	0	0
25.08	0.24	0.45	
39.75	1.81	2.40	
51.08	5.57	7.13	
60.64	22.05	26.86	
77.02	42.78	64.17	
89.66	41.71	60.11	
100	0.19	0.22	

Pushin and Tutundzic, 1933

mol %	κ	
	18°	40°
10.1	0.076	9.2
20.1	0.159	21.3
30.8	0.394	56.3
40.9	1.089	160.9
46.3	2.126	307.9
50.9	3.876	553.0
57.1	9.362	1267
60.8	15.54	2068
66.4	27.94	3757
70.2	38.97	5312
74.8	51.35	7064
79.8	61.08	8890
81.1	62.58	9178
81.7	62.89	-
82.9	63.36	9398
84.8	62.81	9330
86.5	60.71	9064
90.1	50.19	7626
91.1	46.06	6865
94.9	22.31	3261
96.3	11.35	1678
97.1	7.361	1117
98.8	0.852	150.4

Swearingen and Ross, 1934

mol %	κ				
	0°	99°	19.9°	29.9°	40.1°
0	0.012	0.013	0.014	0.015	0.021
12.247	.035	.042	.049	.053	.061
25.033	.134	.163	.200	.231	.266
37.414	.408	.524	.652	.791	.933
49.678	1.781	2.295	2.863	3.392	3.946
55.220	3.989	5.039	6.114	7.162	8.169
59.821	7.770	9.777	11.784	13.659	15.443
64.990	13.567	17.229	20.799	24.101	27.034
69.929	20.486	26.645	32.647	38.336	43.376
73.948	26.051	34.749	43.401	51.716	59.117
74.910	26.549	35.500	44.440	53.075	60.935
76.877	28.373	38.440	48.543	58.382	67.132
77.532	28.816	39.066	49.499	59.482	68.794
78.883	29.731	40.611	51.759	62.468	73.942
79.924	30.134	41.361	53.060	64.160	74.508
80.081	30.230	41.524	53.174	64.462	74.962
80.991	30.542	42.158	54.108	65.817	76.672
82.015	30.643	42.415	54.636	66.647	77.802
82.980	30.613	42.420	54.831	67.071	78.546
83.903	30.517	42.381	54.612	66.744	78.131
84.782	30.205	42.308	54.548	66.949	78.580
85.916	29.600	41.181	53.405	65.502	77.088
87.599	28.200	39.066	50.625	62.048	72.892
89.880	25.089	34.458	44.552	54.733	64.327
91.225	22.263	30.467	39.190	47.933	56.421
93.848	14.791	19.928	25.335	30.720	35.845
97.356	-	-	4.706	5.715	6.793
100	-	-	0.853	0.746	0.774

Venkatesan and Suryanarayana, 1956

φ	κ	φ	κ
30°			
0	0.1642	51.60	14.53
10.59	.1922	61.53	41.45
21.05	.4231	71.36	71.42
31.37	1.087	81.00	82.88
41.57	3.831	90.55	49.80

Thermal constants .

Timofeev, 1905

U	U	U	U
100	0.487	40	0.427
78.2	0.472	0	0.405

initial	%	final	Q dil (by mole pyridine)
100	98.42	6500	
98.42	92.3	5790	
92.3	86.2	5120	
86.2	80.2	3950	
80.2	75.4	3060	
75.4	71.4	2530	
60.6	56.8	1600	
56.8	53.5	1450	
53.5	50.4	1300	
41.4	40	640	

Pushin, Fediuskin and Krgovitsh, 1940-1946

mol %	U	Q mix cal/g
	25°	
0	0.399	-
20	0.404	7.0
40	0.418	13.8
50	0.436	15.9
54.4	0.4405	16.5
58.4	-	16.7
60.7	0.451	16.7
62.2	0.453	16.6
65.1	-	16.6
66.7	-	16.6
70.1	0.463	16.0
81.2	0.482	13.4
100	0.485	-

Pyridine (C_5H_5N) + Propionic acid ($C_3H_6O_2$)

Yajnik, Bhalia and al., 1925

vol-%	η		
	20°	40°	80°
100	759	571	371
90	863	657	412
80	1047	772	474
70	1326	968	588
60	2014	1123	650
50	2144	1341	727
40	2275	1507	768
30	2549	1813	781
20	2232	1450	676
10	1555	1149	624
0	1298	724	461

Matavulj and Hojman, 1939

mol %	n_D	
	20°	60°
0	1.5088	1.4870
10	.4996	.4780
20	.4897	.4690
30	.4802	.4603
40	.4705	.4516
50	.4608	.4422
60	.4505	.4320
65	.4450	.4263
70	.4392	.4203
75	.4330	.4140
80	.4258	.4068
90	.4080	.3900
100	.3868	.3695

Pyridine (C_5H_5N) + Butyric acid ($C_4H_8O_2$)

Tsakalotos, 1908

mol %	d	
	20°	η
0	0.976	932.6
18.2	0.982	1290
35.8	0.988	1996
47.2	0.993	2674
57.1	0.998	3360
74.4	0.991	3890
84.8	0.984	3474
100	0.965	1778

Yajnik, Bhalia and al., 1925

vol %	η		
	20°	40°	80°
0	743	599	473
10	797	664	556
20	873	773	573
30	1031	777	600
40	1203	871	656
50	1574	1067	690
60	2090	1306	730
70	2557	1557	796
80	2997	1757	1017
90	2501	1478	816
100	1202	900	465

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5088	1.4923
15.54	.4918	.4768
25.75	.4820	.4673
35.21	.4730	.4589
45.99	.4628	.4489
50.17	.4589	.4452
56.44	.4527	.4391
65.74	.4437	.4298
68.80	.4484	.4265
72.80	.4360 sic	.4220
75.59	.4328	.4189
79.70	.4277	.4138
84.27	.4217	.4080
100	.3975	.3848

Pyridine (C_5H_5N) + Isobutyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.5089	1.4922
15.14	.4922	.4762
24.92	.4814	.4668
35.53	.4708	.4563
45.99	.4609	.4465
49.73	.4570	.4429
55.26	.4512	.4371
63.95	.4415	.4278
66.79	.4381	.4244
69.61	.4348	.4212
72.21	.4315	.4179
75.12	.4278	.4142
85.37	.4139	.4104
100	.3928	.3798

Pyridine (C_5H_5N) + Valeric acid ($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5088	1.4921
10.70	.4955	.4798
20.63	.4851	.4700
30.11	.4755	.4612
35.21	.4705	.4568
39.44	.4668	.4531
50.24	.4576	.4440
60.20	.4491	.4355
65.41	.4445	.4310
70.10	.4399	.4264
75.52	.4347	.4212
81.21	.4289	.4155
88.62	.4209	.4078
100	.4077	.3950

Pyridine (C_5H_5N) + Isovaleric acid ($C_5H_{10}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5089	1.4927
10.36	.4961	.4803
19.81	.4858	.4702
30.12	.4752	.4607
40.06	.4650	.4513
49.11	.4570	.4436
59.57	.4476	.4340
69.38	.4381	.4246
71.86	.4358	.4292
74.74	.4327	.4192
79.10	.4277	.4141
88.81	.4165	.4033
100	.4030	.3902

Pyridine (C_5H_5N) + Caproic acid ($C_6H_{12}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5089	1.4922
15.49	.4905	.4752
24.40	.4815	.4670
33.92	.4728	.4586
45.13	.4635	.4499
49.55	.4600	.4466
54.72	.4560	.4427
64.46	.4480	.4350
73.65	.4401	.4271
83.10	.4314	.4189
100	.4160	.4040

Pyridine (C_5H_5N) + Heptanoic acid ($C_7H_{14}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5088	1.4921
15.57	.4888	.4738
24.32	.4800	.4658
35.48	.4701	.4564
39.58	.4667	.4533
44.97	.4632	.4497
50.42	.4593	.4459
55.09	.4558	.4424
64.92	.4487	.4353
69.30	.4455	.4322
74.89	.4413	.4280
84.91	.4339	.4210
100	.4222	.4101

Pyridine (C_5H_5N) + Caprylic acid ($C_8H_{16}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5088	1.4922
15.23	.4890	.4738
25.18	.4788	.4647
33.18	.4720	.4582
39.87	.4672	.4539
45.20	.4638	.4505
50.24	.4608	.4471
55.00	.4572	.4440
64.83	.4508	.4379
69.65	.4475	.4347
74.84	.4442	.4314
81.96	.4395	.4269
100	.4276	.4160

Pyridine (C_5H_5N) + Pelargonic acid ($C_9H_{18}O_2$)

Matavulj and Hojman, 1939

mol %	n_D	
	20°	50°
0	1.5088	1.4921
15.18	.4780	.4720
25.69	.4777	.4638
30.36	.4738	.4603
33.24	.4717	.4584
35.43	.4701	.4569
39.95	.4669	.4539
45.37	.4632	.4503
50.15	.4675	.4478
54.83	.4508	.4451
64.69	.4518	.4392
69.72	.4490	.4364
74.63	.4462	.4338
85.09	.4401	.4278
100	.4318	.4198

Pyridine (C_5H_5N) + Capric acid ($C_{10}H_{20}O_2$)

Mata vulj and Hojman, 1939

mol %	n_D	
	30°	50°
0	1.5032	1.4921
15.43	.4828	.4724
25.30	.4735	.4642
34.99	.4663	.4572
45.28	.4597	.4512
48.54	.4579	.4495
55.49	.4542	.4460
63.71	.4498	.4415
68.46	.4472	.4390
72.29	.4452	.4371
83.32	.4398	.4318
100	.4318	.4240

Pyridine (C_5H_5N) + Benzoic acid ($C_7H_6O_2$)

Baskov, 1915

mol %	f.t.	E	min
0	-38.0	-38.0	-
5.0	-	-42.2	124.5
7.3	-32.5	-40.8	-
8.5	-23.0	-40.0	83.5
14.0	-3.5	-41.0	64.5
25.0	+17.5	-40.2	13.0
35.0	32.5	-42.5	8.1
40.48	36.0	-43.0	-
47.07	41.2	-	-
50.0	43.7	+43.7	-
52.0	43.2	-	-
54.39	42.8	+42.8	30.3
57.0	50.0	42.2	24.2
60.0	54.8	38.5	20.1
62.5	65.0	42.0	16.0
70.0	85.5	36.5	9.8
74.94	90.8	39.0	-
80.55	102.3	-	(1+1)
100	121.4	121.4	-

mol %	η		
	110°	125°	140°
0	366.5	-	-
40	875.6	709.1	620.4
50	1051.6	855.7	707.5
56	1280.9	1009.7	800.9
60	1338.8	1046.7	855.6
62	1340.8	1042.4	822.4
63	1435.9	1106.0	886.9
66.66	1552.9	1153.8	935.5
69	1505.2	1162.2	950.5
72	1488.0	1113.9	888.7
75	-	-	-
78	1484.4	1142.0	908.8
82	1498.2	1149.5	908.5
86	1503.9	1173.4	930.1
92	-	1149.0	923.2
100	-	1053.3	854.5

mol %	d		
	110°	125°	140°
0	0.8897	-	-
40	1.0122	0.9999	-
50	.0326	1.0189	1.0059
56	.0455	.0325	.0182
62	.0560	.0440	.0304
66.66	.0626	.0494	.0362
72	.0694	.0560	.0418
75	.0713	.0581	.0447
82	.0747	.0612	.0495
86	-	.0698	.0560
92	-	0.740	.0605
100	-	.0869	-

mol %	α			
	0°	25°	50°	70°
0	-	151.52	-	-
1	111.58	95.61	81.91	86.33
2.5	73.76	63.21	54.04	54.04
5	58.11	45.84	41.63	37.59
7.03	-	39.61	35.76	30.50
10.49	-	32.82	26.58	21.21
15.45	36.56	24.96	19.32	15.28
22.08	35.33	22.82	15.63	11.54
24.98	-	-	-	10.31
34.07	-	18.19	10.89	6.36
35	32.81	17.55	9.57	6.50
41.2	30.55	15.29	8.33	4.72
46.35	28.70	11.99	6.47	3.68
47	27.34	10.12	5.46	3.58
49	25.28	9.37	4.91	3.26
50	23.61	8.92	4.57	3.01
51	21.69	7.87	4.23	2.83
52	20.26	7.31	3.89	2.64
60	-	-	-	2.06
65	-	-	-	1.78

mol %	μ		
	100°	125°	150°
1	85.28	83.58	-
2.5	51.21	-	-
5	37.37	37.22	-
7.03	29.67	-	-
10.49	26.34	-	-
15.45	13.75	-	-
22.08	9.68	7.81	6.87
24.98	8.03	-	-
35	5.02	3.73	3.12
41.2	3.61	-	-
46.35	2.80	-	-
47	2.75	2.06	1.86
49	2.32	2.01	1.89
50	2.23	1.97	1.93
51	2.10	1.94	1.82
52	2.04	1.80	1.77
60	1.75	1.58	1.58
63	1.65	1.53	1.56
65	1.63	1.48	1.59
66.66	1.67	1.66	1.76
67	-	1.67	1.77
68	1.93	1.79	1.86
68.5	-	1.74	1.86
73.5	2.41	2.33	2.41
75	2.84	2.74	2.74
77	3.38	3.48	3.52
80	-	4.88	4.77
82.5	-	6.83	6.69
87	-	16.54	14.84
90	-	40.10	21.75
92	-	75.39	53.41
95	-	243.00	143.77

mol %		°			
		175°	200°	225°	250°
47.5	2.28	2.42	-	-	-
49	1.95	2.25	4.90	-	-
50	1.86	2.19	6.67	-	-
51	1.80	2.09	5.24	-	-
52	1.72	2.04	-	-	-
60	1.67	2.12	9.05	57.87	-
63	-	2.21	-	-	-
65	1.83	-	-	-	-
66.66	1.90	2.26	5.73	-	-
67	1.89	2.28	-	-	-
68	2.05	2.37	-	-	-
68.5	1.94	2.31	5.72	-	-
73.5	2.67	3.08	7.31	43.71	-
75	2.82	3.25	8.62	45.67	-
77	3.57	4.55	-	-	-
80	4.78	5.45	7.52	43.37	-
82.5	6.46	7.21	8.92	45.20	-
87	12.68	-	-	-	-
90	23.93	20.10	16.37	38.56	-
92	39.51	33.47	28.99	51.20	-
95	94.89	67.23	47.70	-	-

α -Picoline (C_6H_7N) (b.t.= 130.7) + Acids					
Lecat, 1949					
		2nd Comp.		Az	
Name	Formula	b.t.	%	b.t.	
Formic acid	CH_2O_2	100.75	-	157	
Acetic acid	$C_2H_4O_2$	118.1	-	145	
Propionic acid	$C_3H_6O_2$	141.3	-	164	

α -Picoline (C_6H_7N) + Acetic acid ($C_2H_4O_2$)				
Pushin and Tutundzic, 1933				
mol %		°		
		18°	40°	
30.8	0.098	0.151		
40.9	0.371	0.598		
49.3	1.496	2.353		
60.3	9.359	13.94		
70.3	26.98	42.49		
79.9	45.40	76.37		
81.9	48.24	81.37		
83.6	50.09	84.83		
85.6	51.40	86.93		
86.3	51.71	87.68		
87.8	50.99	85.75		
89.5	49.31	82.10		
92.6	39.98	65.64		
97.0	11.66	18.91		
98.5	2.809	4.912		

Pyridine (C_5H_5N) + Anthranilic acid ($C_7H_7O_2N$)			
Zhuravlev, 1938			
%	f.t.	%	f.t.
100	145	59.9	25.7
79.9	111	55.1	21.5
69.5	78	50.3	17
65.6	55	44.6	8
62	30		

Pyridine (C_5H_5N) + Mandelic acid ($C_8H_8O_3$)			
Dunstan and Thole, 1910			
%	time of flow (in sec.)	%	time of flow (in sec.)
25°			
0.00	244.4	r 6.04	300.0
1 8.05	325.2	r 8.19	326.0
1 11.02	363.0	r 12.53	388.6
1 15.04	426.9	r 15.03	431.6

β -Picoline (C_6H_7N) + Acetic acid ($C_2H_4O_2$)		
Herington, 1951		
Az		
P	%	b.t.
760	30.4	152.5
212	35.0	114.5 - 115

γ -Picoline (C_6H_7N) + Acetic acid ($C_2H_4O_2$)		
Herington, 1951		
Az		
P	%	b.t.
760	30.3	154.3
212	36.1	116.5 - 117

2,4-Lutidine (C₇H₉N) + Acetic acid (C₂H₄O₂)

Pushin and Tutundzic, 1933

mol %	κ	
	18°	40°
29.5	0.054	0.090
40.1	0.237	0.419
50.4	1.506	2.585
59.7	7.144	12.01
69.4	19.98	35.37
78.9	35.67	65.73
82.7	41.11	76.03
85.4	44.60	81.11
87.1	45.81	82.56
87.6	45.98	82.61
88.0	45.99	82.68
89.0	45.77	81.57
91.8	41.55	71.44
93.6	34.91	59.44
95.5	23.76	40.08
97.7	8.060	14.07

2,6-Lutidine (C₇H₉N) + Acetic acid (C₂H₄O₂)

Herington, 1951

Az		
p	%	b.t.
760	27.8	148.0
212	34.4	110 - 111

2-Aminopyridine (C₅H₆N₂) + Lauric acid (C₁₂H₂₄O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.
0	58.0	60.93	38.2
5.23	55.6	64.92	34.6
15.33	50.8	69.90	32.1
20.49	47.7	73.85	32.9
25.12	44.3	78.71	33.9
29.79	40.0	80.77	33.9
35.16	38.1	82.39	35.0
40.22	40.1	84.00	36.5
45.49	41.4	87.59	39.2
49.85	41.6	93.77	41.8
54.44	41.3	100	43.9

(1+1)

2-Aminopyridine (C₅H₆N₂) + Myristic acid (C₁₄H₂₈O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.
0	58.0	69.32	44.5
10.29	54.2	78.94	47.2
20.57	48.9	83.32	47.6
31.38	46.8	87.73	50.2
48.67	51.3	100	53.9
64.12	46.1		

(1+1)

2-Aminopyridine (C₅H₆N₂) + Palmitic acid (C₁₆H₃₂O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.
0	58.0	65.36	53.5
10.29	54.4	68.53	54.1
17.89	51.4	70.83	55.6
20.00	50.5	73.89	56.5
24.73	52.4	76.85	56.9
26.31	53.0	79.42	57.0
30.70	54.5	81.07	56.9
40.14	57.3	81.53	56.7
45.36	58.4	82.72	57.2
49.33	58.8	87.50	59.4
55.10	58.2	93.44	61.3
58.29	57.3	100	62.5
62.84	55.2		

(1+1)

2-Aminopyridine (C₅H₆N₂) + Stearic acid (C₁₈H₃₆O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.
0	58.0	62.56	61.3
5.55	56.5	68.05	62.8
9.74	55.2	77.93	65.0
14.12	54.9	84.23	65.5
20.10	57.3	87.60	66.8
34.66	62.1	100	69.3
49.31	64.7		

(1+1)

2-Aminopyridine (C₅H₆N₂) + Oleic acid (C₁₈H₃₄O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.	
			I	II
0	58.0	58.39	11.1	-
19.50	49.9	63.60	13.4	-
28.62	43.4	67.28	13.7	-
38.59	29.9	73.32	11.8	-
43.20	19.4	77.83	8.6	-
45.35	12.9	85.73	-	8.7
48.15	9.9	91.80	-	11.6
48.83	9.8	95.56	15.8	12.8
50.34	9.8	100	16.3	13.5
52.44	9.4			

(1+1)

2-Aminopyridine (C₅H₆N₂) + Elaidic acid (C₁₈H₃₄O₂)

Mod and Skau, 1956

mol %	f.t.	mol %	f.t.
0	58.0	64.95	36.5
14.15	52.8	65.76	36.6
25.42	46.0	66.83	36.7
32.15	39.9	69.50	36.4
34.07	36.7	72.95	35.6
37.94	38.2	77.66	36.0
49.23	40.1	78.11	36.3
56.44	39.3	80.29	37.6
62.88	36.3	86.42	40.6
63.15	36.1	100	43.8

(1+1)

2-Aminopyridine ($C_5H_5N_2$) + α -Eleostearic acid
($C_{18}H_{32}O_2$)

Mod and Skau, 1956

mol %	f. t.	mol %	f. t.
0	58.0	62.28	26.5
11.85	52.3	64.74	26.4
32.89	35.3	65.32	26.5
36.07	29.0	68.58	26.9
39.44	25.6	70.19	28.9
41.65	26.3	78.39	38.1
45.11	27.2	82.18	41.4
50.04	27.9	83.89	42.3
52.09	27.6	85.42	43.4
53.24	27.3	100	48.4
57.81	24.6		(1+1)

2-Aminopyridine ($C_5H_5N_2$) + β -Eleostearic acid
($C_{18}H_{32}O_2$)

Mod and Skau, 1956

mol %	f. t.	mol %	f. t.
0	58.0	56.58	58.4
12.01	52.5	59.81	57.1
14.97	51.0	63.69	58.4
20.24	48.9	66.41	58.7
24.12	50.8	71.49	57.4
28.07	53.1	75.64	60.7
36.44	56.3	80.13	63.6
41.46	58.1	82.17	64.7
48.95	59.4	87.72	67.2
51.69	59.3	100	70.5
			(1+1)

2-Amino-3-methylpyridine ($C_6H_8N_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f. t.		mol %	f. t.	
	I	II		I	II
100	62.51	-	52.26	57.6	-
88.33	59.9	-	50.9	56.7 E	-
83.72	57.3	-	50	56.7	-
83.2	57.1 E	-		(1+1)	-
83.06	57.2	-	49.87	56.7	-
78.67	59.4	-	45.28	56.1	-
78.35	59.4	-	33.32	52.7	-
75.77	60.6	-	19.47	44.9	-
73.08	61.5	55.8	16.57	45.4	-
70.01	61.9	56.4	9.81	40.8	-
66.67	62.2	56.7	5.39	36.0	-
	(2+1)		2.38	29.2	--
65.58	62.2	56.6	1.84	26.3	-
61.68	61.7	-	0	33;17	-
54.13	58.8	-			

2-Amino-4-methylpyridine ($C_6H_8N_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f. t.		mol %	f. t.	
	I	II		I	II
100	62.51	-	49.51	79.7	-
85.92	59.5	-	43.99	79.2	-
78.50	55.6 E	-	39.82	77.9	70.3
77.27	58.2	-	33.8	74.7 E	-
74.79	62.8	-	30.78	78.2	-
70.45	68.6	-	19.98	88.1	-
59.55	77.4	-	10.34	94.0	-
54.49	79.3	-	0	99.21	-
50	79.8	72-73			
	(1+1)				

2-Amino-5-methylpyridine ($C_6H_8N_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f. t.	mol %	f. t.
100	62.51	49.88	61.2
88.23	59.8	44.31	60.8
83.48	57.5	40.05	59.7
80.69	55.8	31.2	55.5 E
72.89	50.3	30.15	56.8
71.5	49.0 E	20.07	66.0
69.65	51.2	10	71.7
60.24	58.4	0	76.54
50	61.2	(1+1)	

2-Amino-6-methylpyridine ($C_6H_8N_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f. t.	
	I	II
100	62.51	-
85.28	59.0	-
81.04	56.8	-
79.15	55.7	-
75.67	53.2	-
72.8	50.8 E	-
70.36	54.0	-
65.89	58.6	52.5
61.38	61.8	-
60.39	63.2	-
56.58	64.0	-
50.00	65.3	51.4 (1+1)
43.46	64.9	-
41.14	64.3	47.5
30.18	60.7	41.5
21.95	57.2	-
10.11	49.4	-
5.85	44.9	-
3.6	41.5 E	-
2.30	42.5	-
0	44.22	-

2-Amino-4,6-dimethylpyridine ($C_7H_{10}N_2$) +
Palmitic acid ($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f.t.	
	I	II
100	62.5	-
89.04	60.1	-
80.88	56.2	-
79.09	55.0	-
76.20	52.9 E	-
74.65	55.1	-
71.98	57.6	-
70.43	-	58.6
70.04	-	58.9
65.63	64.8	61.1
64.20	66.5	61.5
59.91	70.2	61.9
53.18	72.6	-
50.74	73.3	-
50.00	73.3 (1+1)	64.2 (1+1)
45.53	72.8	64.2
39.77	71.4	63.0
30.70	67.5	62.5
26.03	65.2	-
24.35	64.2	61.6
20.34	60.3	-
18.03	59.4	-
15.70	57.1 E	-
15.15	57.8	-
10.58	61.5	-
0	68.36	-

Anabasine ($C_{10}H_{11}N_2$) + Formic acid (CH_2O_2)

Babak, Airapetova and Udovenko, 1950

mol %	d		
	25°	50°	75°
100	1.1998	1.1796	1.1564
80.47	.2049	.1844	.1605
67.84	.1695	.1571	.1386
37.64	.1139	.0970	.0720
23.09	.0768	.0626	.0426
0	.0427	.0237	.0003

mol %	η		
	25°	50°	75°
100	1542.8	981.5	682.5
80.47	98318.9	27036.8	10141.1
67.84	657157.9	140646.5	32024.3
50.19	-	-	190234.8
37.64	4112696.5	2424207.1	38952.4
23.09	336315.2	44358.7	11787.9
0	25197.6	7138.5	3154.1

2,2'-Dipyridylamine ($C_{10}H_9N_3$)+ Palmitic acid ($C_{16}H_{32}O_2$)

Mod, Magne and Skau, 1956

mol %	f.t.	mol %	f.t.
100	62.51	50.18	60.9
89.22	60.7	50.00	61.0 (1+1)
81.17	58.7	44.71	60.0
79.66	58.3	40.80	58.3 E
73.13	56.1	39.41	61.2
70.00	54.9 E	30.36	75.3
69.79	55.0	20.52	83.7
66.19	56.7	10.62	89.7
59.68	59.3	0	95.09
54.53	60.6		

Quinoline (C_9H_7N) + Formic acid (CH_2O_2)

Pushin, Matavulj and al., 1940-1946

%	mol %	n_D
100	100	20° 1.3714
76.5	90	.4666
58.8	80	.5001
51.7	75	.5162
45.5	60	.5301
41.6	66.7	.5386
35.3	60	.5520
26.3	50	.5697
19.2	40	.5848
13.3	30	.5971
10.6	25	.6030
8.2	20	.6083
3.8	10	.6174
0	0	.6269

Quinoline (C_9H_7N) + Acetic acid ($C_2H_4O_2$)

Pushin and Rikovski, 1932

mol %	f.t.	mol %	f.t.
0	-15.5	50	-15 (1+1)
10	-20.5	55	-16.5
15	-25	60	-20
20	-31	66.7	-27
25	-29	72	-35.5
30	-26	75	-24.5
35	-22	80	-12
40	-19.5	90	+ 6.5
45	-17	100	16.5

Miskidzhyan and Kirilyuk, 1956.		
mol %	d	
	0°	20°
100	1.0732	1.0491
94.56	-	.0773
89.99	.1139	.0917
84.91	-	.1013
80.03	.1254	.1057
69.45	.1269	.1067
67.29	.1271	.1078
64.75	-	.1068
51.79	.1221	.1050
49	.1199	.1041
47	-	.1040
40.38	.1191	.1038
34.54	-	.1030
30.02	.1171	.1005
19.92	.1167	.1001
9.38	.1122	.0968
0	.1107	.0939

mol %	η	
	0°	20°
100	-	1232
94.56	-	2800
89.99	9030	5090
84.91	-	6280
80.03	18590	7610
69.45	20440	8110
67.29	20730	8170
64.75	-	8040
51.79	16300	7130
49	15140	6900
47	-	6670
40.38	12130	6090
34.54	-	5550
30.02	9470	5260
19.92	7970	4550
9.38	6960	4080
0	6340	3760

Pushin, Fedjuskin and Krgovitsch, 1940-1946		
mol %	U	Q mix (cal/g)
	25°	
0	0.354	-
16.7	0.360	3.78
33.3	0.376	8.05
41.7	0.392	10.0
50.0	-	11.30
50.5	0.406	-
60.0	-	12.24
63.0	0.426	-
65.0	-	12.50
70.0	-	12.14
75.0	0.447	11.13
87.5	0.467	7.87
100	0.485	-

Pushin and Matavulj, 1932			
mol %	η _D	mol %	η _D
		25°	
0	1.6239	62.9	1.5210
13.4	.6076	66.7	.5118
22.1	.5960	70.0	.5030
34.0	.5778	75.4	.4877
45.1	.5584	80.8	.4702
51.4	.5462	89.8	.4330
58.6	.5306	100	.3698
60.0	.5278		

Patten, 1902					
%	κ	%	κ	%	κ
		25°			
0.00	0.0512	28.1	1.49	56.3	17.50
0.16	.0512	28.9	1.69	58.2	18.80
0.33	.0522	29.8	1.86	58.7	19.70
0.49	.0531	30.5	2.02	59.8	20.70
0.65	.0538	31.3	2.19	60.8	21.50
0.81	.0541	31.9	2.40	62.0	22.90
1.45	.0552	32.7	2.61	63.7	24.00
2.26	.0630	33.3	2.80	64.3	25.00
3.03	.0675	34.0	3.04	66.2	25.90
3.82	.0740	34.6	3.28	67.3	26.80
4.75	.0815	35.2	3.49	68.2	27.20
5.32	.0910	36.0	3.70	69.2	28.00
6.30	.0991	36.5	3.96	70.4	28.60
6.77	.113	37.3	4.22	71.2	29.20
7.46	.123	37.8	4.52	72.0	29.50
8.17	.132	38.4	4.86	72.8	29.70
8.80	.144	39.5	5.38	73.8	29.90
9.50	.156	40.8	6.08	75.0	30.00
10.18	.173	41.7	6.70	76.1	30.40
10.81	.183	43.0	7.34	78.0	29.90
12.13	.216	44.1	8.04	78.7	29.60
13.22	.247	45.0	8.70	80.5	29.50
14.31	.288	46.0	9.33	82.5	27.80
15.67	.325	47.1	10.10	84.7	25.30
16.95	.376	48.1	10.60	86.2	22.80
18.0	.385	48.9	11.30	87.4	20.50
19.2	.392	50.0	11.60	88.7	18.40
20.4	.441	50.6	12.30	89.5	16.40
21.3	.495	51.2	12.80	90.1	14.50
22.2	.691	52.0	13.20	91.1	13.20
23.2	.776	52.0	13.90	92.1	10.60
24.2	.860	53.6	14.50	94.3	6.45
24.9	.960	54.0	15.30	97.4	1.28
25.7	1.08	54.6	15.70	100 below	0.008
26.7	1.25	55.2	16.20		
27.6	1.32	55.9	16.80		

Pushin and Tutundzic, 1933		
mol %	18°	40°
29.0	0.018	-
38.2	0.052	0.108
49.3	0.256	0.505
59.3	1.293	2.291
67.2	4.050	6.748
69.6	5.380	8.937
75.0	9.340	15.34
81.0	14.98	24.16
84.1	17.64	28.11
86.4	19.19	29.81
88.7	19.67	30.43
90.2	19.58	-
91.8	17.91	26.48
94.0	14.27	-
97.0	4.854	7.008

Quinoline (C_9H_7N) + Propionic acid ($C_3H_6O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.6248	1.6106
15.15	.6034	.5892
24.77	.5883	.5741
34.86	.5710	.5568
44.56	.5529	.5398
47.67	.5469	.5338
49.60	.5429	.5297
52.82	.5362	.5229
55.09	.5314	.5181
64.56	.5085	.4953
69.08	.4962	.4830
74.55	.4802	.4671
84.46	.4480	.4350
100	.3962	.3734

Sakhanov, 1911

molarity of quinolin	λ	molarity of quinolin	λ
25°			
0.310	below 0.001	0.935	0.002
0.507	" "	1.626	0.008

Quinoline (C_9H_7N) + Butyric acid ($C_4H_8O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.6249	1.6106
15.25	.5995	.5856
25.08	.5822	.5685
35.09	.5638	.5507
45.53	.5442	.5310
47.70	.5392	.5260
50.07	.5339	.5207
52.54	.5289	.5159
54.81	.5236	.5106
64.32	.5018	.4888
66.56	.4961	.4830
69.97	.4876	.4744
72.63	.4812	.4679
75.28	.4740	.4608
84.77	.4467	.4336
100	.3979	.3850

Quinoline (C_9H_7N) + Valeric acid ($C_5H_{10}O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.6248	1.6106
15.28	.5970	.5831
25.08	.5783	.5647
34.85	.5598	.5463
44.69	.5401	.5267
47.60	.5343	.5210
49.86	.5296	.5163
52.85	.5232	.5100
55.43	.5176	.5045
64.38	.4979	.4849
69.70	.4853	.4722
74.88	.4727	.4597
84.52	.4485	.4358
100	.4077	.3950

Quinoline (C_9H_7N) + Caproic acid ($C_6H_{12}O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.6248	1.6106
15.87	.5924	.5782
24.47	.5758	.5620
35.63	.5538	.5402
45.18	.5348	.5214
47.55	.5300	.5169
49.65	.5257	.5126
52.84	.5192	.5061
54.56	.5154	.5024
65.36	.4927	.4799
66.74	.4897	.4768
69.97	.4829	.4700
72.35	.4778	.4649
74.80	.4724	.4596
84.59	.4506	.4379
100	.4160	.4070

Quinoline (C_9H_7N) + Heptanoic acid ($C_7H_{14}O_2$)

Matavulj, 1939

mol %	n_D	
	20°	50°
0	1.6248	1.6106
15.05	.5923	.5784
24.96	.5715	.5581
34.99	.5514	.5382
44.89	.5317	.5186
47.85	.5260	.5130
49.45	.5229	.5099
52.70	.5164	.5034
55.18	.5116	.4987
64.17	.4936	.4808
69.94	.4820	.4692
74.37	.4730	.4604
84.60	.4523	.4399
100	.4222	.4101

Quinoline (C₉H₇N) + Caprylic acid (C₈H₁₆O₂)

Matavulj, 1939

mol %	n _D	
	20°	50°
0	1.6248	1.6106
14.99	.5897	.5760
24.86	.5688	.5553
34.82	.5482	.5351
44.64	.5292	.5162
47.03	.5246	.5115
49.67	.5196	.5065
52.40	.5143	.5013
54.54	.5102	.4972
64.11	.4921	.4791
70.22	.4804	.4677
74.38	.4728	.4502
84.92	.4534	.4413
100	.4275	.4159

Quinoline (C₉H₇N) + Pelargonic acid (C₉H₁₈O₂)

Matavulj, 1939

mol %	n _D	
	20°	50°
0	1.6248	1.6106
15.30	.5869	.5731
25.19	.5649	.5517
35.31	.5440	.5310
45.07	.5253	.5122
47.73	.5202	.5071
50.14	.5158	.5027
52.37	.5117	.4987
55.23	.5063	.4933
64.15	.4902	.4774
69.57	.4807	.4679
75.29	.4708	.4582
84.89	.4548	.4427
100	.4317	.4198

Quinoline (C₉H₇N) + Caprinic acid (C₁₀H₂₀O₂)

Matavulj, 1939

mol %	n _D	
	30°	50°
0	1.6203-4	1.6106
14.83	.5808	.5720
24.69	.5590	.5502
35.01	.5376	.5290
44.98	.5188	.5103
47.34	.5144	.5058
50.01	.5095	.5010
52.68	.5048	.4963
54.87	.5011	.4926
64.36	.4849	.4766
69.27	.4767	.4685
74.25	.4688	.4606
84.46	.4529	.4449
100	.4318	.4240

Quinoline (C₉H₇N) + Benzoic acid (C₇H₆O₂)

Baskov, 1914

mol %	f.t.	E	min	tr.t.	min
0	-22.0	-	-	-	-
3	-22.3	-	-	-	-
8	-30.0	-	-	-	-
13	-37.0	-42.5	10.4	-	-
17	-	-39.9	30.0	-	-
25	-11.0	-41.0	4.0	-	-
35	+11.4	-42.0	1.5	-	-
45	+20.6	-	-	+23.0	50.3
50	-	-	-	23.2	40.7
55	44.4	-	-	20.5	20.4
60	61.4	-	-	18.5	8.0
75	95.2	-	-	-	-
100	121.4	(1+1)	-	-	-

Baskov, 1914

mol %	d			
	99°	104°	115°	125°
0	1.0309	1.0267	1.0174	1.0085
20	.0515	-	.0387	.0304
50	.0819	-	.0696	.0612
66.6	.0961	-	.0829	.0742
82	-	-	.0863	.0781
100	-	-	-	.0769

Baskov, 1914

mol %	η			
	99°	104°	115°	125°
0	752	706	-	-
10	911	852	798	730
20	1087	1018	-	-
35	1455	-	1203	1069
45	1821	1590	1322	1176
50	2015	1732	1489	1309
61	2304	-	-	-
66.6	2481	2148	1762	1502
68	2401	2107	1808	1547
70	2380	2082	-	-
73	2313	1982	1779	1524
75	2308	2003	1766	1490
82	-	-	1378	1188
100	-	-	-	1049

Baskov, 1914

mol %	κ			
	50°	75°	100°	125°
25	0.00126	0.00223	0.00315	0.00402
35	.00203	.00413	.00602	.00782
45	.00290	.00625	.00978	.01240
50	.00486	.00996	.01427	.01905
55	.00585	.01106	.01686	.02227
60	-	.01456	.02154	.02670
63	-	-	.02222	.02758
66.6	-	-	.02341	.02810
69	-	-	.02171	.02678
75	-	-	.01901	.02409
85	-	-	-	.00891
100	-	very low	-	-

mol %	η		
	150°	175°	196°
25	0.00457	0.00571	0.00641
35	.00932	.01088	.01226
45	.01457	.01676	.01838
50	.02194	.02353	.02421
55	.02509	.02632	-
60	.02950	.03108	-
63	.03015	.03129	-
66.6	.03064	.03194	-
69	.02919	.03008	-
75	.02695	.02788	-
85	.01064	.01237	-
100	very low		

Nicotine (C₁₀H₁₄N₂) + Formic acid (CH₂O₂)

Babak, Airapetova and Udoenko, 1950

mol %	d		
	25°	50°	75°
100	1.1998	1.1796	1.1564
92.78	.2167	.1948	.1682
89.93	.2185	.1968	.1789
88.42	.2170	.1961	.1678
79.67	.8884	.1676	.1475
75.07	.1784	.1524	.1332
73.63	.1769	.1528	.1329
73.44	.1716	.1489	.1298
69.64	.1607	.1404	.1200
69.62	.1589	.1394	.1189
69.05	.1578	.1379	.1175
68.14	.1571	.1369	.1157
67.06	.1529	.1321	.1115
66.67	.1515	.1309	.1113
65.74	.1507	.1260	.1056
65.58	.1484	.1254	.1048
64.65	.1480	.1234	.1028
63.38	.1432	.1199	.1004
60.08	.1319	.1110	.0886
49.97	.0953	.0733	.0524
41.69	.0704	.0466	.0232
28.56	.0460	.0234	0.9995
20.44	.0273	.0077	.9835
11.40	.0146	0.9969	.9742
0	.0068	.9866	.9670

mol %	η		
	25°	50°	75°
100	1542.8	981.5	682.5
92.78	10479.4	5112.8	2899.1
89.93	15925.7	6911.0	3628.6
88.42	18987.0	7548.5	4117.1
79.67	45678.3	15835.1	7085.8
75.07	69127.6	10292.7 (?)	8056.6
73.63	77754.1	21004.4	8439.3
73.44	81253.8	21555.7	8546.8
69.64	107889.7	26892.7	10055.1
69.62	109862.9	27249.8	10318.9
69.05	112248.6	27356.0	10336.5
68.14	115657.9	27527.5	10247.4
67.06	116127.0	26857.1	9792.6
66.67	117909.8	25915.4	9701.7
65.74	119169.9	26272.0	9752.9
65.58	117344.7	26219.6	9760.4
64.65	114817.0	25579.8	9470.9
63.38	109404.2	24230.7	9031.9
60.08	92148.0	20849.6	7781.3
49.97	37646.7	11426.6	4778.5
41.69	20565.1	7610.2	3305.2
28.56	10126.4	3964.5	2120.0
20.44	6426.6	2962.9	1658.6
11.40	4695.7	2421.3	1453.4
0	3894.2	2037.6	1262.6

Phenylhydrazine (C₆H₈N₂) + Formic acid (CH₂O₂)

Bastitch and Pushin, 1947

mol %	f.t.	E
100	7.7	-
95	0.5	-10
90	13	-8.5
85	36.8	-9
82	54.2	-
80	62	-
70	86	-
66.7	91	-
60	97	-
50	101 (1+1)	-
40	96.5	-
37	94	-
33.3	91	-
30	82.5	-
20	67	-
15	57.8	16
10	44	16.2
5	32.8	-
0	19	-

Phenylhydrazine (C₆H₈N₂) + Acetic acid (C₂H₄O₂)

Trifonov and Cherbov, 1929

mol %	f.t.	E
0	19.2	-
5	15.7	15.7
7	28.0	18.5
10	32.0	15.6
15	38.8	14.8
20	48.0	-
25	53.0	-
35	57.0	-
40	59.0	-
45	60.5	-
50	61.5 (1+1)	-
55	58.0	-
60	56.0	-
65	51.0	-
75	40.0	-
80	26.0	-9.5
83	12.5	-5.0
85	-8.8	-8.8
90	+5.0	-
95	12.0	-
100	16.2	-

Pushin and Rikovski, 1932

mol %	f. t.	E
0	19	-
5	16	15.5
10	33.5	15
20	51.5	14
30	59	12
40	63	10
50	65 (1+1)	-
55	64	-
60	61	-
66.7	54.5	-
70	50	-
75	33	-
85	1	-
90	7.5	-
100	15.5	-

Pushin and Matavulj, 1932

mol %	n_D	mol %	n_D
65°			
0	1.585	63.4	1.499
10	1.574	66.8	1.491
20.5	1.562	69.5	1.484
31.5	1.550	70.6	1.481
41.2	1.537	79.7	1.451
51.5	1.521	89.9	1.409
61.4	1.502	100	1.3537
62.4	1.500		

Azobenzene ($C_{12}H_{10}N_2$) + Acetic acid ($C_2H_4O_2$)

Kremann and Zechner, 1925

%	f. t.	E
100	17	-
95.5	20	-
91.7	24.1	-
86.6	28	-
80.8	33.5	-
74.9	38.5	-
69.1	41.5	-
63.5	44	16
58.3	46.5	-
53.5	48	-
49.4	49	16
47.5	51	-
43.3	52	-
39.1	53	16
33.1	54	-
29	55.5	16
25.4	55	-
20.2	58	-
15.4	59.5	-
10	61.5	-
4.8	63.5	-
0	65	-

Dan Tyrer, 1910

%	d	%	d
25°			
97.987	0.8978	85.796	0.9167
95.127	.9030	100	-
88.293	.9133		

Azobenzene ($C_{12}H_{10}N_2$) + Succinic acid ($C_4H_6O_4$)

Kremann and Zechner, 1925

%	f. t.	E
100	183	-
83.6	180	-
85.7	178	-
79.1	177.1	-
71.7	177.1	-
66.8	178	65
60.1	178.1	"
57.5	178.1	"
49.6	177	"
47.3	178.1	"
44.0	178.1	"
41.6	178.1	"
37.2	178	"
32.3	178.1	"
28.4	178	"
23.1	178.1	"
19.1	178	"
18.0	178.1	"
14.2	178	-
8.8	178	-
4.3	178	-
0	65	-

Azobenzene ($C_{12}H_{10}N_2$) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	11	43.8	46
94.6	4.5	39.2	48.5
89.3	- 2.5	34.9	50
83.6	+ 5	30.9	52.5
80.6	4.5	26.2	55
75.5	16	25.5	55
70.2	25	20.6	58
64.9	30.5	14.3	60.5
59.5	35.5	5.1	63
55.0	39	0	65
49.6	42		
E : - 9°			

Azobenzene ($C_{12}H_{10}N_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kremann and Zechner, 1925

%	f. t.	E
100	55.5	-
92.3	46	-
91	15	-
71.7	-8	-
64.3	+13	-
57.3	28	-10
51.4	36	-10
46.9	40	-
41.1	44.1	-
31.6	51	-
22.5	55	-10
14.3	59	-
10	62	-
0	65	-

Azobenzene ($C_{12}H_{10}N_2$) + Benzoic acid ($C_7H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	E
0	65	-
10.7	62	-
16.5	58	58
22.8	65	"
30.3	72	"
36.2	79	-
45.1	88	-
49.6	92	58
51.1	94	-
57.0	98	-
65.1	109	-
72.0	102	58
79.6	113	-
90	118	-
100	121	-

Azobenzene ($C_{12}H_{10}N_2$) + p-Toluic acid ($C_8H_8O_2$)

Pfeiffer, Angern, Wang and al., 1930

%	E	f. t.
100	176	178
90	62	175
80	62	171
70	62	166.5
60	61.5	160
50	61.5	152
40	61.5	143
30	62	133
20	61.5	118
10	61.5	87
5	61	66
0	66	68

Azobenzene ($C_{12}H_{10}N_2$) + Cinnamic acid ($C_9H_8O_2$)

Kremann and Zechner, 1928

%	f. t.	E
0	65	-
13.3	66	-
23.8	80	62
29.7	86	-
32.8	89	-
38.8	94	62
43.3	98	-
47.3	102	62
57.4	109	-
62.5	113	62
69.8	117.5	-
77.3	122.5	-
88.2	128	-
100	133	-

Azobenzene ($C_{12}H_{10}N_2$) + Salicylic acid
($C_7H_6O_3$)

Kremann and Zechner, 1928

%	f. t.	E
100	156	-
88.7	152	-
79.9	148	-
69.3	143	63.5
61.3	139	-
53.4	134	63.5
47.9	131	"
47.1	130	"
34.7	120	-
25.8	110	63.5
19.6	99	"
15.4	92	-
7.7	76	-
0	65	-

p-Aminoazobenzene ($C_{12}H_{11}N_3$) + Desoxycholic
acid ($C_{24}H_{40}O_4$)

Cilento, 1951 (fig.)

mol %	f. t.	E
0	124.5	120
4.5	120	120
10	142	120
20	155	120
30	162	120
40	168	120
50	172	120
60	175	120
70	178	120
80	179 (1+4)	-
90	176	-
98	170	-
100	173	-

p-Dimethylaminoazobenzene ($C_{14}H_{15}N_3$)
+ Cholic acid ($C_{24}H_{41}O_5$)

Cilento, 1951 (fig.)

mol %	f. t.	E
0	118	116
5	160	116
10	167	116
20	173	116
30	176	116
40	179	116
50	180	116
60	182	116
66	184 (1+2)	-
70	186	181
80	188	181
90	194	181
100	198	181

p-Dimethylaminoazobenzene ($C_{14}H_{15}N_3$)
+ Desoxycholic acid ($C_{24}H_{41}O_4$)

Cilento, 1951 (fig.)

mol %	f. t.	E
0	118	116
5	174	"
10	184	"
20	188	"
30	192	"
40	195	"
50	198	"
60	200	"
70	202	"
80	204	-
86	204	-
90	201	-
100	173	-

(1+4) or (1+6)

p-Chlorazobenzene ($C_{12}H_9N_2Cl$) + p-Oxyazobenzene
($C_{12}H_{11}ON_2$)

Grimm, Günther and Tittus, 1931 (fig.)

mol %	f. t.	E
0	152.5	-
10	149	-
20	145	-
30	139	-
40	131	78
50	121	-
60	110	77
70	98	-
80	84	76.5
83.5	78	-
90	84	76
100	89	-

Hydrocyanic acid (HCN) + Formic acid (CH_2O_2)

Peiker and Coffin, 1933

mol %	f. t.	mol %	f. t.
0	8	60	-28
10	3	70	-29
20	- 2	80	-29
30	- 9	90	-17
40	-14	100	-14
50	-21		

Acetonitrile (C_2H_3N) + Formic acid (CH_2O_2)

Joukovsky, 1933

%	mol %	f. t.	E
100	100	+ 8.5	-
81.4	79.6	- 5.5	-
66.2	63.6	-17.5	-54.5
51.4	48.5	-29.0	-
35.4	32.8	-44	-54.5
20.8	19.0	-54.5	-54.5
0	0	-45	-

Acetonitrile (C_2H_3N) + Acetic acid ($C_2H_4O_2$)

Popov, 1926

%	Q mix	%	Q mix
5.18	-506.3	17.84	-285
9.73	-398.1	21.56	-251.0
14.16	-319.7		

Acetonitrile (C_2H_3N) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr and Ralston, 1944

%	f. t.
30.7	0.0
91.0	10.0
100	16.30

Acetonitrile (C_2H_3N) + Pelargonic acid
($C_9H_{18}O_2$)

Hoerr and Ralston, 1944

%	f. t.
33.8	0.0
97.1	10.0
100	12.25

ACETONITRILE + CAPRIC ACID

Acetonitrile (C_2H_3N) + Capric acid
($C_{10}H_{20}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
10.4	0.0	98.7	30.0
17.3	10.0	100	31.24
39.8	20.0		

Acetonitrile (C_2H_3N) + Undecanoic acid
($C_{11}H_{22}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
8.0	0.0	64.9	20.0
14.7	10.0	100	28.13

Acetonitrile (C_2H_3N) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
1.9	0.0	19.7	30.0
2.6	10.0	93.9	40.0
7.1	20.0	100	43.92

Acetonitrile (C_2H_3N) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
1.4	0.0	17.5	30.0
1.9	10.0	98.8	40.0
5.4	20.0	100	41.76

Acetonitrile (C_2H_3N) + Myristic acid
($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
0.7	0.0	11.5	40.0
0.9	10.0	92.3	50.0
1.8	20.0	100	54.15
3.8	30.0		

Acetonitrile (C_2H_3N) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
0.4	0.0	94	40.0
0.5	10.0	96.0	50.0
1.1	20.0	100	52.54
2.8	30.0		

Acetonitrile (C_2H_3N) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
below 0.1	0.0	2.6	40.0
0.2	10.0	8.9	50.0
0.4	20.0	92.3	60.0
1.0	30.0	100	62.82

Acetonitrile (C_2H_3N) + Margaric acid
($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f.t.	%	f.t.
below 0.1	10.0	7.6	50.0
0.2	20.0	97.2	60.0
0.6	30.0	100	60.94
1.9	40.0		

Lauronitrile ($C_{12}H_{23}N$) + Acetic acid ($C_2H_4O_2$)

Hoerr, Binkerd, Pool and al., 1944

%	f.t.
0	4.02
24.1	-0.7 E

Myristonitrile ($C_{14}H_{27}N$) + Acetic acid ($C_2H_4O_2$)

Hoerr, Binkerd, Pool and al., 1944

%	f.t.
0	19.25
49.6	8.8 E

Palmitonitrile ($C_{16}H_{31}N$) + Acetic acid ($C_2H_4O_2$)

Hoerr, Binkerd, Pool and al., 1944

%	f.t.	%	f.t.
81.6	15.2 E	8.6	30.0
67.6	20.0	0	31.40

Stearonitrile ($C_{18}H_{35}N$) + Acetic acid ($C_2H_4O_2$)

Hoerr, Binkerd, Pool and al., 1944

%	f.t.	%	f.t.
96.9	16.4 E	67.9	30.0
94.9	20.0	0	40.88

Succinonitrile ($C_4H_6N_2$) + Benzoic acid ($C_7H_6O_2$)

Schreinemakers, 1898

mol %	f.t.	mol %	f.t.
0	54.5	11.8	86
1.56	51	19.2	95.5
2.58	47	39.2	107
3.37	47	63.9	110
4.14	54.5	100.0	120
6.0	66.5		

Glutaronitrile ($C_5H_6N_2$) + Acetic acid ($C_2H_4O_2$)

Phibbs, 1955

mol %	Dv (cc/mole)	Q mix
	28°	
78.8	-	-140
62.8	-	-165
50.0	-0.51	-
42.0	-	-155
28.9	-	-133
27.5	-	-128
17.9	-	-77

mol %	η
	28°
100	1110
64.9°	2680
35.7	4050

Glutaronitrile ($C_5H_6N_2$) + Propionic acid
($C_3H_6O_2$)

Phibbs, 1955

mol %	Dv (cc/mole)	Q mix
	28°	
40.0	-	-242
50.0	-0.75	-
61.4	-	-263

Tetracyanoheptane ($C_{11}H_{12}N_4$) + Acetic acid
($C_2H_4O_2$)

Phibbs, 1955

20 %	f.t. = 77.0
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L. MIXED OXYGEN-NITROGEN DERIVATIVES

+ HYDROXYL DERIVATIVES

XXXIV. MIXED OXYGEN-NITROGEN DERIVATIVES + ALCOHOLS

Formamide (CH_2ON) + Methyl alcohol (CH_3O)

Joukovsky, 1933

wt%	mol%	f. t.	E
0	0	+ 2.5	-
16.2	21.4	-12.7	-
40.1	48.5	-34.6	-
50.9	59.3	-44.2	-
65.3	72.6	-61.5	-
68.3	75.2	-65.6	-
74.4	80.4	-75.3	- 103
87.1	90.5	- 103.1	- 103
100	100	- 98.4	-

Merry and Turner, 1914 (fig.)

mol %	d	
	25°	40°
0	1.1311	1.1103
9.80	1.1000	1.0822
20.12	1.0699	1.0523
30	1.0397	1.0222
40	1.0074	0.9901
50.22	0.9737	0.9563
60.34	0.9388	0.9213
70	0.9043	0.8870
80	0.8670	0.8495
90	0.8284	0.8109
100	0.7864	0.7689

mol %	η	
	25°	40°
0	3359	2379
9.80	2874	2090
20.12	2431	1780
30	2067	1538
40	1749	1307
50.22	1484	1116
60.34	1247	995
70	1055	818
80	861	685
90	746	584
100	557	457

Formamide (CH_2ON) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Ishikawa, 1927

%	d	%	d
		30°	
0	0.78462	82.3664	1.06641
18.5524	0.83404	87.4379	1.08837
33.4695	0.88522	100	1.14505
60.2019	0.97719		

Merry and Turner, 1914

mol %	d	
	25°	40°
0	1.1281	1.1104
10	1.0817	1.0640
18.92	1.0427	1.0252
29.76	1.0012	0.9850
39.07	0.9669	0.9499
50.09	0.9308	0.9157
59.29	0.8995	0.8827
69.80	0.8675	0.8504
80.09	0.8376	0.8207
89.95	0.8102	0.7935
100	0.7834	0.7667

Davis, 1918

%	d	%	d
		25°	
0	1.1331	75	0.8554
25	1.0260	100	0.78506
50	1.9346		

Merry and Turner, 1914

mol %	d	
	25°	40°
0	3359	2379
10	3054	2174
18.92	2782	1986
29.76	2515	1800
39.07	2259	1622
50.09	2010	1465
59.29	1816	1319
69.80	1563	1145
80.09	1376	1016
89.95	1229	916
100	1086	821

Davis, 1918

%	15°	25°	35°
0	-	3358	-
25	3389	2577	2066
50	2488	1939	1580
75	1761	1412	1174
100	-	1096	-

Formamide (CH_3ON) + Propyl alcohol ($\text{C}_3\text{H}_8\text{O}$)

English and Turner, 1914

%	d	η	%	d	η
25°					
0	1.1281	3299	59.99	0.9063	2622
11.23	.0818	3270	69.99	.8773	2396
20.67	.0441	3233	79.97	.8494	2223
29.94	.0084	3122	90.03	.8223	1987
39.96	0.9724	2985	94.55	.8108	1935
49.99	.9383	2790	100	.7976	1928

Formamide (CH_3NO) + Butyl alcohol ($\text{C}_4\text{H}_{10}\text{O}$)

English and Turner, 1914

%	d	η	%	d	η
25°					
0	1.1214	3302	59.82	0.9056	3685
10.00	.0832	3483	69.84	.8752	3524
19.95	.0445	3646	80.02	.8463	3315
30	.0061	3757	89.96	.8199	3142
39.81	0.9716	3866	95	.8071	3136
49.98	.9370	3811	100	.7952	3368

Formamide (CH_3NO) + Isoamyl alcohol ($\text{C}_5\text{H}_{12}\text{O}$)

Drucker and Kessel, 1911

%	d	η	%	d	η
76.5°			0°		
100	0.7656	951	100	0.8253	8834
97.18	.7731	966	97.18	.8315	8482
90.01	.7908	1005	90.01	.8497	8361
69.92	.8440	1178	69.92	.9041	9920
49.84	.9044	1311	49.84	.9649	11111
30.14	.9726	1321	30.14	1.0335	10638
10.38	1.0479	1292	10.38	.1111	8576
0	1.0901	1255	0.0	.1549	7553

English and Turner, 1914

%	d	η	%	d	η
25°					
0	1.1281	3299	69.98	0.8802	3993
10.01	.0838	3567	79.95	.8528	3799
19.94	.0454	3800	84.92	.8397	3687
29.98	.0085	4071	89.86	.8272	3571
39.35	0.9727	4252	95.01	.8219	3579
50.01	.9385	4273	100	.8036	3798
60	.9081	4174			

Formamide (CH_3ON) + Methyl malate 1 ($\text{C}_6\text{H}_{10}\text{O}_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.978	-8.20	-10.10	-12.01	-15.21	-16.21	-17.16
24.939	-9.04	-15.57	-13.61	-16.69	-17.77	-
12.4945	-9.38	-11.93	-14.01	-16.81	-18.17	-
5.008	-9.38	-11.78	-13.98	-16.77	-17.97	-19.97
2.504	-9.19	-11.58	-13.98	-16.77	-17.97	-

Formamide (CH_3ON) + Methyl tartrate ($\text{C}_6\text{H}_{10}\text{O}_6$)

Yen-ki-Heng, 1936

t	d	(α)	
		yellow	green
16.865%			
2	1.2013	13.10	13.67
13.5	.1914	14.50	15.50
26.5	.1828	15.84	16.97
38	.1703	16.79	18.10
50.5	.1593	17.39	19.02
60.5	.1509	17.40	19.50
70	.1426	18.13	19.74
79	.1348	18.31	19.96

Lowry and Abram, 1915

w.l.	(α)		w.l.	(α)	
	25g/100cc	100%		25g/100cc	100%
20°					
6708	+12.65	+2.79	4811	+18.72	-
6438	13.41	2.65	4800	18.74	-2.47
5890	15.39	2.22	4722	18.86	-
5782	15.77	-	4678	18.87	-
5780	15.80	2.05	4529	18.7	-
5700	16.00	-	4378	18.0	-
5461	16.96	1.28	4358	17.85	-8.93
5218	17.67	-	4275	17.3	-
5153	17.97	-	4251	17.0	-
5105	18.07	-	4137	16.0	-
5086	18.14	-0.39			

Formamide (CH_3ON) + Ethyl tartrate ($\text{C}_8\text{H}_{14}\text{O}_6$)

Winther, 1907

%	d	(α) _D	%	d	(α) _D
20°					
100	1.20435	+7.48			
74.671	1.19857	+16.00	8.860	1.14245	29.74
51.103	.18060	22.55	5.345	.13958	30.13
25.687	.15769	27.60	1.899	.13647	30.3
			0	.13483	-
(α)					
74.671%	25.687%	8.860%	5.345%	1.899%	
20°					
red	13.47	22.15	24.33	24.52	24.8
yellow	16.00	27.60	29.74	30.13	30.3
green	18.00	32.51	35.29	35.91	36.0
pale blue	20.01	40.15	43.89	44.50	44.7
dark blue	20.00	42.08	46.60	47.74	48.1

Lowry and Dickson, 1915

$\%$	(α)				
	6708Å	5893Å	5780Å	5461Å	4358Å
20°					
5	22.80	29.38	30.50	33.73	46.75
10	22.75	28.99	30.01	33.20	46.30
20	21.87	27.80	28.76	31.86	43.89
100	6.69	7.45	7.52	7.50	1.62
w. l.	(α)		w. l.	(α)	
	100%			25g/100cc	
20°					
6708	+6.69		6708	+21.81	
6438	7.00		6438	23.67	
5893	7.45		5893	27.73	
5780	7.52		5780	28.72	
5461	7.50		5461	31.70	
5086	6.96		5086	35.64	
4800	5.85		4800	38.82	
4358	1.62		4679	40.0	
4271	0.21		4406	43.3	
4261	0.03		4359	43.68	
4251	-0.14		4199	44.7	
4191	-1.38		4144	45.4	
4132	-2.77		3960	46.0	
4033	-5.54				
3969	-7.62				
3903	-10.34				
3900	-10.18				
3879	-11.22				

Dimethylformamide ($\text{C}_3\text{H}_7\text{ON}$) + Methyl alcohol (CH_3O)

Dawson, Leader and al., 1951

t	d	η	κ
50%			
25	0.8658	638	0.208
20	.8706	703	.200
10	.8807	855	.167
0	.8900	1042	.154
-10	.8999	1321	.124
-20	.9098	1596	.107
-30	.9196	1991	.0906
-40	.9291	2400	.0772
-50	.9388	2912	.0557

Acetamide ($\text{C}_2\text{H}_5\text{ON}$) + Methyl alcohol (CH_3O)

Vandenbergh, 1903

%	D b. t.
90.1	+1.40
83.3	2.66
77.5	3.56

Acetamide ($\text{C}_2\text{H}_5\text{ON}$) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Speyers, 1902

mol%	f. t.
81.47	0.0
67.13	18.6
43.94	42.5
21.08	62.0

Mortimer, 1923

mol%	f. t.	mol%	f. t.
81.5	0	24.2	60
66.2	20	0.	78.5
40.9	40		

Speyers, 1902

t	d
sat. sol.	
0.0	0.8562
17.8	.8696
35.0	.8974
54.4	.9416
70.3	.9815

Taimni, 1929

%	η						
	40°	35°	30°	25°	20°	15°	10°
69.41	-	1608	1805	2040	2322	2666	-
61.41	-	1899	2145	2458	2832	-	3829
54.26	-	2240	2557	2951	3434	4093	-
49.2	2218	2530	2911	3382	3970	-	-

Acetamide (C_2H_5ON) + Pinacol ($C_6H_{14}O_2$)

Albanski, 1949

mol%	f. t.
0	82
80.8	34.4 E
100	42.3

Lecat, 1949

Acetamide (C_2H_5ON) (b. t. = 221.15) + Alcohols.

2 nd comp.		Az		
Name	Formula	b. t.	%	b. t.
Glycol-monoacetate	($C_4H_8O_3$)	190.9	95	190.7
Isobutyl-lactate	($C_7H_{14}O_3$)	182.15	88	181.5
Isoamyl-lactate	($C_8H_{16}O_3$)	202.4	72	196.0
Ethylen-chlorhydrine	(C_2H_5OCl)	175.8	-	175.5

Caprylamide ($C_8H_{17}ON$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
82.0	10.0	32.7	60.0
65.0	30.0	27.8	64.7
43.5	50.0	0	105.9

Caprylamide ($C_8H_{17}ON$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
88.7	10.0	34.5	70.0
75.4	30.0	24.1	78.5
56.9	50.0	0	105.9
45.5	60.0		

Caprylamide ($C_8H_{17}ON$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
86.5	10.0	39.2	70.0
79.4	30.0	25.9	82.3
60.3	50.0	0	105.9
49.3	60.0		

Caprylamide ($C_8H_{17}ON$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
85.5	10.0	19.3	90.0
79.6	30.0	7.2	100.0
66.2	50.0	0	105.9
43.1	70.0		

Capramide ($C_{10}H_{21}ON$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
93.7	10.0	44.5	60.0
86.8	30.0	37.1	70.0
59.9	50.0	0	98.5

Capramide ($C_{10}H_{21}ON$) + Ethyl alcohol (C_2H_5O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
95.8	10.0	36.7	70.0
89.3	30.0	22.2	78.5
69.7	50.0	0	98.5
53.2	60.0		

Capramide ($C_{10}H_{21}ON$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
94.4	10.0	41.7	70.0
90.2	30.0	20.9	82.3
72.8	50.0	0	98.5
58.2	60.0		

Capramide ($C_{10}H_{21}ON$) + Butyl alcohol (C_4H_9O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
96.6	10.0	45.9	70.0
91.8	30.0	12.7	90.0
76.5	50.0	0	98.5

Lauramide ($C_{12}H_{25}ON$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
95.9	10.0	37.9	60.0
88.9	30.0	32.7	64.7
56.5	50.0	0	102.4

Lauramide ($C_{12}H_{25}ON$) + Ethyl alcohol (C_2H_5O)

A.W.Ralston, Hoerr and W.O.Ralston, 1943

%	f. t.	%	f. t.
97.3	10.0	34.8	70.0
89.8	30.0	21.3	78.5
64.0	50.0	0	102.4
48.5	60.0		

Lauramide ($C_{12}H_{25}ON$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
96.5	10.0	39.4	70.0
89.7	30.0	22.1	82.3
67.8	50.0	0	102.4
53.8	60.0		

Lauramide ($C_{12}H_{25}ON$) + Butyl alcohol (C_4H_9O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
97.8	10.0	14.8	90.0
90.9	30.0	2.8	100.0
72.4	50.0	0	102.4
44.5	70.0		

Myristamide ($C_{14}H_{29}ON$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1949

%	f. t.	%	f. t.
99.0	10.0	73.2	60.0
97.4	30.0	64.1	64.7
87.6	50.0	0	105.1

Myristamide ($C_{14}H_{29}ON$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
98.8	10.0	55.3	70.0
96.4	30.0	35.9	78.5
86.9	50.0	0	105.1
74.9	60.0		

Myristamide ($C_{14}H_{29}ON$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
98.9	10.0	56.9	70.0
96.9	30.0	32.8	82.3
86.6	50.0	0	105.1
74.6	60.0		

Myristamide ($C_{14}H_{29}ON$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.2	10.0	26.7	90.0
96.4	30.0	8.0	100.0
87.3	50.0	0	105.1
63.3	70.0		

Palmitamide ($C_{16}H_{33}ON$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.5	10.0	79.8	60.0
99.2	30.0	59.5	64.7
94.2	50.0	0	107.0

Palmitamide ($C_{16}H_{33}ON$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.6	10.0	53.0	70.0
98.5	30.0	31.7	78.5
90.6	50.0	0	107.0
77.4	60.0		

Palmitamide ($C_{16}H_{33}ON$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.6	10.0	55.9	70.0
98.2	30.0	30.8	82.3
89.3	50.0	0	107.0
77.1	60.0		

Palmitamide ($C_{16}H_{33}ON$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.7	10.0	22.3	90.0
98.1	30.0	8.7	100.0
89.9	50.0	0	107.0
59.9	70.0		

Stearamide ($C_{18}H_{37}ON$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f.t.	%	f.t.
99.6	10.0	89.0	60.0
99.3	30.0	81.2	64.7
96.6	50.0	0	109.7

Stearamide ($C_{18}H_{37}ON$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1943

%	f.t.	%	f.t.
99.8	10.0	66.7	70.0
99.2	30.0	45.5	78.5
94.7	50.0	0	109.7
86.6	60.0		

Stearamide ($C_{18}H_{37}ON$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f.t.	%	f.t.
99.8	10.0	64.1	70.0
99.0	30.0	37.1	82.3
93.6	50.0	0	109.7
83.3	60.0		

Stearamide ($C_{18}H_{37}ON$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f.t.	%	f.t.
99.9	10.0	33.1	90.0
98.9	30.0	14.5	100.0
93.3	50.0	0	109.7
69.5	70.0		

Urea (CH_4ON_2) + Methyl alcohol (CH_4O)

Vandenberghe, 1903

%	D b.t.	%	D b.t.
97.09	+1.35	81.97	+2.285
91.74	1.125	82.65	.19
90.09	1.26	81.97	.285
89.29	1.35	80.65	.410
84.75	1.98	78.12	.740
84.03	1.975	76.33	.91

Timofeev, 1894

%	f.t.	%	f.t.
90.1	-12	73.30	40
87.56	0	60.0	62
82.71	+19	48.20	71

Speyers, 1902

mol%	f.t.	mol%	f.t.
0.0	92.66	40.4	84.04
10.8	91.29	61.2	74.23
21.7	89.19		

t	d	t	d
sat. sol.			
0.0	0.8612	50.5	0.9086
17.4	.8674	66.8	.9534
29.7	.8764		

Walton and Wilson, 1925

1	%	2	f.t.
-	(urea)	79.73 (1+1)	18.79
78.84		80.44	18.14
-		82.28	16.63
80.27		83.53	15.23
-		88.70	8.03
83.30		89.02	7.33
85.76		92.29	0.25
88.36		95.12	-9.85
89.08		96.07	-15.20
-		96.37	-17.00
-		96.43	-17.15
-		96.24	-17.45
-		96.55	-17.60
-		96.52	-18.10
-		96.75	-20.20
-		96.84	-20.55
-		96.83	-21.30
-		97.11	-24.90
-		99.68	-78.00

tr.t. = 19.2°

Urea (CH_4ON_2) + Ethyl Alcohol ($\text{C}_2\text{H}_6\text{O}$)

Bovalini, 1931

%	t	p
91.36	28	33.40
91.30	30	43.48
91	29	40.91
88.82	25.1	31.72
88.38	24.6	31.70
85.22	29	38.42

Timofeev, 1894

%	f. t.	%	f. t.
97.38	-9	85.98	60
96.84	0	85.26	61
95.23	+18	76.41	81
91.36	41		

Speyers, 1902

%	f. t.	%	f. t.
98.05	0.0	94.39	32.3
96.96	10.5	90.82	55.5
95.93	22.3	85.60	72.1

t	d	t	d
sat. sol.			
0.0	0.8213	51.5	0.8031
15.7	.8113	71.5	.8124
31.6	.8060		

Urea (CH_4ON_2) + Propyl alcohol ($\text{C}_3\text{H}_8\text{O}$)

Timofeev, 1894

%	f. t.	%	f. t.
98.38	0	92.82	60
97.53	19	89.07	80
97.50	20	89.58	82
95.55	39	85.34	98
95.13	40	85.05	97

Urea (CH_4ON_2) + Erythritol ($\text{C}_4\text{H}_{10}\text{O}_4$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
100	118	-	40	86.5	77
90	114.5	-	30	78	78
80	111.5	-	20	99	77
70	107	59	10	117	74
60	101	67	0	132	-
50	94	75			

Thiourea ($\text{CH}_4\text{N}_2\text{S}$) + Methyl alcohol (CH_4O)

Shnidman, 1933

wt%	mol%	f. t.
88.05	94.60	25.11
83.63	92.40	40.80
77.99	90.01	53.76
75.44	87.95	62.00

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Methyl alcohol (CH_4O)

Vandenbergh, 1903

%	D b. t.
90.9	+0.83
80	2.115
75.2	2.675

Speyers, 1902

%	f. t.	%	f. t.
68.82	0.0	41.42	22.5
58.30	10.6	10	40.9

t	d	t	d
sat. sol.			
0.0	0.9565	28.2	1.021
15.5	.9902	39.5	1.044

Urethane ($C_3H_7NO_2$) + Ethyl alcohol (C_2H_6O)

Speyers, 1902

mol%	f. t.	mol%	f. t.
76.09	0.0	27.65	30.9
63.14	10.5	11.68	40.5
47.79	21.7		
t	d	t	d
sat. sol.			
0.0	0.8914	30.9	1.004
14.1	.9443	43.7	.044

Richards and Chadwell, 1919

%	d	%	d
20°			
100	0.78922	70.657	0.86117
94.840	.80128	61.591	.88521
89.017	.81529	52.528	.91059
80.098	.83704	44.442	.93466
78.930	.84001	40.779	.94495

Taimni, 1929

%	40°	35°	30°	25°	20°	15°
39.2	-	1800	2044	2342	2701	3150
37.0	-	1889	2144	2486	2880	-
33.3	-	2047	2340	2701	3148	-
31.2	1896	2152	2460	2849	3321	-

Urethane ($C_3H_7NO_2$) + Propyl alcohol (C_3H_8O)

Speyers, 1902

mol%	f. t.	mol%	f. t.
19.48	0.0	68.75	30.4
32.27	10.4	85.74	40.7
53.31	21.6		
t	d	t	d
sat. sol.			
0.0	0.8798	29.1	0.9804
13.3	.9156	42.1	1.033

Lecat, 1949

Urethane ($C_3H_7O_2N$) (b.t.=185.25) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Heptyl alcohol	($C_7H_{16}O$)	176.15	71.5	174.8	20.5
Octyl alcohol	($C_8H_{18}O$)	195.2	27.5	183.5	39
Isooctyl alcohol	($C_8H_{18}O$)	180.4	63	177.0	30
Propylen glycol	($C_3H_8O_2$)	187.8	-	183.5	-
Pinacol	($C_6H_{14}O_2$)	174.35	-	173.5	-
Linalool	($C_{10}H_{18}O$)	198.6	-	185.0	-
Dichlorhydrin	($C_3H_6OCl_2$)	182.5	20	186.5	-

Urethane ($C_3H_7O_2N$) + Erythritol ($C_4H_{10}O_4$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
100	118	-	40	105	47
90	116	-	30	103	47
80	114	41	20	98	47
70	112	44	10	84	48
60	110	45	4	69	48
50	107	47	0	49	-

Urethane ($C_3H_7O_2N$) + Menthol ($C_{10}H_{20}O$)

Adamonis, 1933

mol%	f. t.	mol%	f. t.
2.9	48.0	41.0	33.8
5.9	47.5	46.0	31.5
9.1	45.5	51.4	29.5
12.4	44.0	57.0	27.2
15.9	43.5	63.0	25.8
19.6	41.5	69.5	26.5
23.4	40.5	76.3	29.8
27.5	38.5	83.7	33.0
31.8	37.2	91.5	37.0
36.3	35.0		

Hrynakowski, 1934

E: 73.5% 25°

Methylurethane ($C_4H_9O_2N$) + Menthol ($C_{10}H_{20}O$)
Scheuer, 1910

%	mol%	f. t.	%	mol%	f. t.
0	0	54.0	66.12	48.40	44.2
0.41	0.16	53.9	67.82	50.32	43.85
0.88	0.43	53.75	71.44	54.60	42.9
1.96	0.94	53.5	75.66	59.91	41.3
2.82	1.37	53.25	78.02	63.04	40.15
4.00	1.96	52.9	80.88	67.04	38.55
5.85	2.90	52.5	84.11	71.78	36.4
8.03	4.02	51.9	85.94	74.61	35.15
11.34	5.78	51.25	88.71	79.06	32.65
14.25	7.39	50.7	90.87	82.88	33.25
17.12	9.02	50.2	92.08	84.83	34.15
20.99	11.39	49.75	93.06	86.57	34.95
26.30	14.62	49.15	94.54	89.28	36.2
33.70	19.63	48.4	95.03	90.20	36.75
37.06	22.06	48.2	95.36	92.55	37.95
42.37	26.03	47.7	97.15	94.25	38.8
46.58	30.05	47.25	97.65	95.23	39.35
51.83	34.09	46.6	98.39	96.70	40.15
55.67	37.64	46.1	99.24	98.44	41.05
60.50	42.41	45.2	100	100	42
60.60	42.51	45.2			
d					
%	mol%				
		55.6°	74.6°	82.2°	99.0°
n					
%	mol%				
0	0	1.1356	1.1156	1.1084	1.0896
33.38	14.12	.0270	.0089	.0016	0.9856
56.80	38.72	0.9611	0.9448	0.9382	.9237
74.28	58.13	.9234	.9074	.9010	.8868
84.39	72.21	.9035	.8858	.8788	.8648
92.46	85.50	.8840	.8687	.8625	.8489
100	100	.8693	.8551	.8496	.8372
η					
%	mol%				
		55.6°	74.6°	82.2°	99.0°
(α)					
%	dark red	D	yellow	green	
		76.75°			
33.38	-38.288	-48.036	-50.075	-56.750	
56.80	-39.027	-49.190	-51.087	-58.213	
74.28	-38.780	-48.799	-51.273	-58.203	
84.39	-39.047	-49.242	-51.393	-58.354	
92.46	-40.290	-50.894	-53.652	-60.229	
100	-40.149	-50.155	-52.385	-59.419	
(α)					
%	pale blue 2	indigo blue	viol.		
		76.75°			
33.38	-79.726	-93.256	-94.130		
56.80	-79.850	-	-96.217		
74.28	-78.618	-	-95.70		
84.39	-79.785	-95.628	-96.713		
92.46	-82.610	-98.615	-99.841		
100	-	-97.592	-98.584		

Allyl isothiocyanate (C_4H_5NS) + Methyl alcohol
(CH_4O)

Joukovsky, 1933

mol%	p	
	30°	
100	160.2	
90.7	152	
63.8	135.6	
20	105.5	
0	7.3	

Allyl isothiocyanate (C_4H_5NS) + Ethyl alcohol
Kozlenko and Miskidzhyan, 1955 (C_2H_6O)

mol%	d		mol%	d	
	20°				
0	1.0123	70	0.8879		
20	0.9869	80	.8602		
33	.9627	90	.8300		
50	.9342	100	.7901		
60	.9127				
mol%	η				
	20°	-15°			
0	725	1242			
10	-	1297			
20	739	-			
33	801	1673			
50	1040	-			
60	1208	2402			
67	1293	-			
70	-	2464			
72.2	1290	-			
80	1310	2695			
90	1430	2765			
100	1650	2930			

mol%	σ		
	20°	0°	-18.3°
0	34.81	36.82	42.94
10	33.27	-	-
20	32.11	32.51	35.09
33	29.86	31.25	32.63
50	28.58	29.82	31.02
60	27.71	29.18	-
67	27.25	-	-
70	-	27.58	30.56
72.2	26.05	-	-
80	25.25	27.06	28.72
90	24.03	26.09	28.04
100	22.6	25.2	29.08

mol%	n _D		mol%	n _D	
	20°				
0	1.5292	70	1.4325		
20	.5085	80	.4105		
33	.4885	90	.3876		
50	.4677	100	.3625		
60	.4523				

Allyl Isothiocyanate (C_4H_5NS) + Methyl Malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)				
	red	yellow	green	pale blue	dark blue viol.
20°					
50.135	-4.93	-5.88	-6.82	-7.64	-7.96 -8.24
25.0675	-4.51	-5.15	-5.78	-6.46	-6.86 -
12.5338	-3.83	-4.47	-5.27	-5.74	-6.06 -
5.280	-4.36	-4.73	-5.30	-5.87	-6.25 -6.82
2.640	-5.68	-6.44	-7.20	-7.95	-8.33 -

Allylisothiocyanate (C_4H_5NS) + Hexyl Alcohol
($C_6H_{14}O$)

Lecat, 1949

%	b. t.
0	152.05
-	151.8 Az
100	157.85

Allylisothiocyanate (C_4H_5NS) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.
0	152.05
-	151.8 Az
100	197.4

Allyl Isocyanate (C_4H_5NO) + Ethyl Alcohol
(C_2H_6O)

Wagner, 1903

%	d 30°	η (alcohol=1)
0	-	0.6100
11.77	0.98226	0.5879
17.25	0.96732	0.5995
33.41	0.92827	0.6512
54.55	0.88062	0.7331
76.09	0.83692	0.8523
87.72	0.8141	0.9237

Methyl thiocyanate (C_2H_3NS) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)				
	red	yellow	green	pale blue	dark blue viol.
20°					
49.903	-5.01	-6.01	-6.81	-7.31	-8.12 -8.02
24.975	-5.09	-6.09	-6.89	-7.33	-7.29 -
12.4875	-5.21	-6.41	-6.89	-6.89	-6.81 -
4.882	-5.54	-6.93	-8.51	-7.91	-7.12 -6.13
2.441	-5.54	-5.14	-3.96	-3.17	-2.37 -

Ammonium thiocyanate (CH_4N_2S) + Methyl alcohol
(CH_4O)

Shnidman, 1932

%	f. t.	%	f. t.
62.89	24.58	50.70	54.76
59.95	32.94	45.45	64.55
55.30	44.80		

Ammonium thiocyanate (CH_4N_2S) + Ethyl alcohol
(C_2H_6O)

Shnidman, 1934

%	f. t.	%	f. t.
80.03	18.45	76.54	43.36
78.46	33.25	73.28	57.62
77.84	36.93	71.37	64.20

Methyl cyanacetate ($C_4H_5O_2N$) + Methyl alcohol
(CH_4O)

Thouvenot, 1910

%	d	(α) magn.
25°		
100	0.7891	3.430
69.15	.8687	.632
52.58	.9188	.782
0	1.1067	4.205

Benzamide (C_7H_7ON) + Ethyl alcohol (C_2H_6O)

Speyers, 1902

mol%	f. t.	mol%	f. t.
96.92	0.0	85.56	50.4
95.75	10.4	79.14	72.3
91.28	32.6		
t	d	t	d
0.0	0.8331	57.2	0.8754
14.1	.8328	72.8	.9226
36.2	.8434	sat. sol.	

Formanilide (C_7H_7ON) + Glycerol ($C_3H_8O_3$)

Dreyer, 1904

mol%	v	mol%	v
0.1°		10.1°	
0	0.599	0	0.544
0.25	.575	1	.504
0.5	.547	2.3	.458
1.0	.222	4.1	.408
2.0	.198	7.2	.344
3.9	.189	11.6	.249
7.3	.155	13.8	.220
10.7	.126	19.2	.173
13.8	.109	24.4	.147
19.6	.073		
24.2	.065		
20.3°		35.0°	
0	0.876	0	0.898
0.25	.848	2.3	.729
0.5	.820	4.0	.577
1.0	.784	8.2	.321
1.7	.740	10.8	.201
2.0	.716	13.9	.094
3.9	.607		
7.3	.464		
10.7	.377		
13.8	.315		
19.6	.209		
24.2	.182		

v = crystallization velocity.

Acetanilide (C_8H_9ON) + Methyl alcohol (CH_4O)

Vandenberghe, 1903

%	D b. t.
92.59	+0.49
83.33	1.095
76.33	1.630

Speyers, 1902

mol%	f. t.	mol%	f. t.
94.62	0.0	82.95	40.2
92.98	11.5	76.28	47.4
88.88	22.8	64.76	60.9
86.04	33.6	66.67	63.3

Mortimer, 1923

mol %	f. t.	mol %	f. t.
87.2	0	53.6	60
78.8	20	36.7	80
68.1	40	0	113.0

Speyers, 1902

t	d	t	d
sat. sol.			
0.0	0.8602	43.9	0.9206
16.7	0.8698	61.7	0.9596
29.9	0.8924		

Kerler, 1894

molarity	25°	λ	61°
2.593	6.549		11.796
1.729	11.064		16.704
0.576	26.17		38.786
0.115	50.552		70.532

Acetanilide (C_8H_9ON) + Ethyl alcohol (C_2H_6O)

Speyers, 1902

mol%	f. t.	mol%	f. t.
94.99	0.0	84.60	43.5
93.16	10.8	68.64	61.6
82.07	42.5		

Mortimer, 1923

mol%	f. t.	mol%	f. t.
55.2	0	64.9	60
90.5	20	0	113.0
81.9	40		

Shishokin, 1929

mol%	f. t.	mol%	f. t.
0	114	49.76	78.3
22.54	99.2	59.73	69
31.23	92.9	70.63	57.5
40.25	86	79.24	45.2

Speyers, 1902

t	d	t	d
sat. sol.			
0.0	0.8420	58.1	0.9156
17.2	0.8472	76.7	0.9596
39.0	0.8721		

Acetanilide (C_8H_9ON) + Chloral hydrate
($C_2H_5O_2Cl_3$)

Angeletti, 1928

 E_1 : 31.5 % 18° E_2 : 42.7 % 25°Acetanilide (C_8H_9ON) + Menthol ($C_{10}H_{20}O$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	42.5	46.3	83.0
94.2	40.0	41.3	87.0
88.6	37.0	36.5	91.0
85.2	35.0 E	31.7	94.0
83	38.0	27	96.8
77.5	45.5	22.3	98.9
72.1	50.5	17.3	102.2
66.8	56.0	13.2	105.2
61.5	64.0	8.5	109.6
56.4	70.0	4.3	111.7
51.3	76.0	0	112

Acetyl-o-toluidine ($C_9H_{11}ON$) + Methyl alcohol
(CH_4O)

Hall, Collett and Lazzell, 1933

mol%	f. t.	mol%	f. t.
0	110.3	44.52	79.6
14	102.4	54.45	71.0
16.40	100.7	63.55	61.4
25.65	94.9	73.50	47.9
30.50	91.0	77.66	42.1
36.40	86.5	89.69	18.3
40.20	83.3		

Acetyl-o-toluidine ($C_9H_{11}ON$) + Ethyl alcohol
(C_2H_6O)

Hall, Collett and Lazzeil, 1933

mol%	f. t.	mol%	f. t.
0	110.3	52.45	75.2
14.50	102.0	58.62	69.9
20.05	99.2	68.20	60.3
28.10	93.5	75.55	52.3
35.40	87.7	86.01	34.8
45.06	80.8	90.80	23.9

Acetyl-o-toluidine ($C_9H_{11}ON$) + Propyl alcohol
(C_3H_8O)

Hall, Collett and Lazzell, 1933

mol%	f. t.	mol%	f. t.
0	110.3	59.60	68.9
13.20	103.2	67.70	60.0
36.70	87.4	79.85	45.0
46.20	79.2	84.82	36.7
50.62	76.2		

Acetyl-o-toluidine ($C_9H_{11}ON$) + Isopropyl alcohol
(C_3H_8O)

Hall, Collett and Lazzell, 1933

mol%	f. t.	mol%	f. t.
0	110.3	58.70	71.8
7.20	106.2	66.06	66.0
17.50	100.2	74.39	57.1
27.50	94.4	76.87	54.1
38.90	86.7	78.28	52.2
48.30	79.8	88.69	34.5

Acetyl-o-toluidine ($C_9H_{11}ON$) + Butyl alcohol
($C_4H_{10}O$)

Hall, Collett and Lazzell, 1933

mol%	f. t.	mol%	f. t.
0	110.3	57.86	70.8
11.80	103.5	66.60	62.1
32.20	90.6	78.42	47.7
36.90	86.7	89.50	26.5
49.65	77.2		

Acetyl-o-toluidine ($C_9H_{11}ON$) + Isobutyl alcohol
($C_4H_{10}O$)

Hall, Collett and Lazzell, 1933

mol%	f. t.	mol%	f. t.
0	110.3	49.94	77.2
12.40	103.1	57.65	72.3
21.20	98.0	69.49	60.7
32.08	91.4	79.26	49.2
42.10	83.0	89.70	30.1

Acetyl-p-toluidine ($C_9H_{11}ON$) + Methyl alcohol
(CH_4O)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
95.096	39.1	59.40	105.3
89.91	59.1	55.76	109.3
89.65	60.3	40.95	123.3
77.25	83.7	11.05	142.7
72.23	91.7	0	148.5

Acetyl-p-toluidine ($C_9H_{11}ON$) + Ethyl alcohol
(C_2H_6O)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
96.655	27.8	77.50	86.1
94.340	43.9	50.42	116.6
89.78	62.0	33.90	129.3
89	63.7	0	148.5
85.26	73.1		

Acetyl-p-toluidine ($C_9H_{11}ON$) + Propyl alcohol
(C_3H_8O)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
90.461	56.9	45.48	118.9
79.58	81.3	38.68	123.8
68.73	95.6	11.41	139.1
56.65	108.0	0	148.5
46.28	117.2		

Acetyl-p-toluidine ($C_9H_{11}ON$) + Isopropyl alcohol
(C_3H_8O)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
96.213	32.3	56.98	110.1
89.62	62.9	41.65	122.3
79.28	87.4	31.85	129.3
74.33	91.0	0	148.5
70.99	93.6		

Acetyl-p-toluidine ($C_9H_{11}ON$) + Butyl alcohol
($C_4H_{10}O$)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
95.510	32.6	47.85	116.0
89.68	59.5	33.44	127.7
76.04	82.8	18.28	137.8
68.72	95.9	0	148.5
60.18	106.0		

Acetyl-p-toluidine ($C_9H_{11}ON$) + Isobutyl alcohol
($C_4H_{10}O$)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
92.831	51.4	47.58	116.5
89.55	62.8	37.04	125.0
78.27	85.1	27.41	130.9
68.36	97.9	0	148.5
58.80	106.5		

Acetyl-p-toluidine ($C_9H_{11}ON$) + tert. Butyl alcohol
($C_4H_{10}O$)

Pollock, Collett and Lazzell, 1946

mol%	f. t.	mol%	f. t.
92.56	55.2	49.12	117.7
84.73	77.6	35.51	128.1
78.91	87.1	23.06	136.6
68.53	100.1	0	148.5
59.25	109.5		

Capranilide ($C_{16}H_{25}NO$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
84.6	10.0	8.7	60.0
58.6	30.0	4.3	64.7
20	50.0	0	69.5

Capranilide ($C_{16}H_{25}NO$) + Ethyl alcohol (C_2H_6O)
(95%)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
74.9	10.0	8.2	60.0
55.2	30.0	0	69.5
21.7	50.0		

Capranilide ($C_{16}H_{25}NO$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
84.1	10.0	14.2	60.0
68.5	30.0	0	69.5
31.2	50.0		

Capranilide ($C_{16}H_{25}NO$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
79.9	10.0	31.3	50.0
64.5	30.0	0	69.5

Lauranilide ($C_{18}H_{29}NO$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
97.3	10.0	18.9	60.0
90.9	30.0	13.5	64.7
35.1	50.0	0	77.2

Lauranilide ($C_{18}H_{29}NO$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
90.5	10.0	21.8	60.0
81.8	30.0	6.5	70.0
44.6	50.0	0	77.2

Lauranilide ($C_{18}H_{29}NO$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
93.8	10.0	28.6	60.0
85.8	30.0	9.8	70.0
80.0	30.0	unst.	0
49.6	50.0		77.2

Lauranilide ($C_{18}H_{29}NO$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
88.6	10.0	48.4	50.0
79.4	30.0	10.2	70.0
73.0	30.0	II.	77.2

Palmitanilide ($C_{22}H_{37}NO$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.5	10.0	79.8	60.0
99.2	30.0	59.5	64.7
94.2	50.0	0	90.2

Palmitanilide ($C_{22}H_{37}NO$) + Ethyl alcohol (C_2H_5O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.4	10.0	32.8	70.0
97.2	30.0	12.2	78.5
87.7	50.0	0	90.2
66.9	60.0		

Palmitanilide ($C_{22}H_{37}NO$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.4	10.0	40.9	70.0
97.7	30.0	8.8	82.3
87.7	50.0	0	90.2
71.8	60.0		

Palmitanilide ($C_{22}H_{37}NO$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
98.2	10.0	39.8	70.0
97.9	30.0	0	90.2
82.3	50.0		

Stearanilide ($C_{24}H_{41}NO$) + Methyl alcohol (CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.9	10.0	93.8	60.0
99.8	30.0	86.2	64.7
99.0	50.0	0	94.9

Stearanilide ($C_{24}H_{41}NO$) + Ethyl alcohol (C_2H_5O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.7	10.0	56.5	70.0
98.8	30.0	44.7	78.5
92.9	50.0	0	94.9
82.3	60.0		

Stearanilide ($C_{24}H_{41}NO$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.7	10.0	52.4	70.0
98.7	30.0	15.0	82.3
92.3	50.0	0	94.9
79.6	60.0		

Stearanilide ($C_{24}H_{41}NO$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
99.4	10.0	54.1	70.0
97.9	30.0	6.5	90.0
89.9	50.0	0	94.9

Benzanilide ($C_{13}H_{11}ON$) + Mannitol ($C_6H_{14}O_6$)

Kofler and Brandstätter, 1942

%	f. t.
-	161 E
100	166

Benzanilide ($C_{13}H_{11}ON$) + Benzoin ($C_{14}H_{12}O_2$)

Vanstone, 1913

mol%	f. t.	E	mol%	f. t.	E
100	133.0	-	53.97	121.8	116.6
88.81	128.3	123.0	39.09	134.3	116.6
78.81	123.6	118.0	24.38	146.9	-
65.84	117.6	117.6	0	160.8	-
E : 36 mol%		116.6°			

Benzanilide ($C_{13}H_{11}ON$) + Stigmasterol ($C_{29}H_{48}O$)

Kofler and Brandstätter, 1942

%	f. t.
0	167
E	146

Phenyl urea ($C_7H_8ON_2$) + Ethyl alcohol (C_2H_6O)

Meldrun and Turner, 1910

g/100cc alcohol	D b. t.
10.32	+0.998
8.21	.803
6.99	.696
5.89	.595
5.20	.533

N,N-Diphenylcapramide ($C_{22}H_{29}ON$) + Methyl alcohol (CH_4O)

Ralston, Hoerr and Pool, 1943

%	f. t.
73.5	10.0
33.4	30.0
0	47.5

N,N-Diphenylcapramide ($C_{22}H_{29}ON$) + Ethyl alcohol (C_2H_6O)

Ralston, Hoerr and Pool, 1945

%	f. t.
67.4	10.0
26.7	30.0
0	47.5

N,N-Diphenylcapramide ($C_{22}H_{29}ON$) + Isopropyl alcohol (C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.
66.3	10.0
30.9	30.0
0	47.5

N,N-Diphenyl capramide ($C_{22}H_{29}ON$) + Butyl alcohol ($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.
63.7	10.0
30.8	30.0
0	47.5

N,N-Diphenyllauramide ($C_{24}H_{33}ON$) + Methyl alcohol
(CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.
91.8	10.0
55.3	30.0
9.4	50.0
0	57.0

N,N-Diphenyllauramide ($C_{24}H_{33}ON$) + Ethyl alcohol
(C_2H_5O)

Ralston, Hoerr and Pool, 1943

%	f. t.
87.3	10.0
65.4	30.0
10.0	50.0
0	57.0

N,N-Diphenyllauramide ($C_{24}H_{33}ON$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.
82.4	10.0
56.5	30.0
9.2	50.0
0	57.0

N,N-Diphenyllauramide ($C_{24}H_{33}ON$) + Butyl alcohol
($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.
79.6	10.0
54.3	30.0
11.7	50.0
0	57.0

N,N-Diphenylpalmitamide ($C_{28}H_{41}ON$) + Methyl alcohol
(CH_3O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
98.3	10.0	16.1	60.0
94.8	30.0	6.7	64.7
49.7	50.0	0	69.5

N,N-Diphenylpalmitamide ($C_{28}H_{41}ON$) + Ethyl alcohol
(C_2H_5O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
98.9	10.0	15.0	60.0
95.3	30.0	0	69.5
50	50.0		

N,N-Diphenylpalmitamide ($C_{28}H_{41}ON$) + Isopropyl alcohol
(C_3H_8O)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
93.9	10.0	18.2	60.0
88.2	30.0	0	69.5
52.6	50.0		

N,N-Diphenylpalmitamide ($C_{28}H_{41}ON$) + Butyl alcohol
($C_4H_{10}O$)

Ralston, Hoerr and Pool, 1943

%	f. t.	%	f. t.
93.1	10.0	48.7	50.0
84.1	30.0	0	69.5

N,N-Diphenylstearamide (C ₃₀ H ₄₅ ON) + Methyl alcohol Ralston, Hoerr and Pool, 1943 (CH ₄ O)			
%	f. t.	%	f. t.
98.9	10.0	25.0	60.0
96.3	30.0	14.3	64.7
72.9	50.0	0	72.3
N,N-Diphenylstearamide (C ₃₀ H ₄₅ ON) + Ethyl alcohol Ralston, Hoerr and Pool, 1943 (C ₂ H ₆ O)			
%	f. t.	%	f. t.
99.2	10.0	24.4	60.0
97.6	30.0	2.9	70.0
65.8	50.0	0	72.3
N,N-Diphenylstearamide (C ₃₀ H ₄₅ ON) + Isopropyl al- cohol (C ₃ H ₈ O)			
Ralston, Hoerr and Pool, 1943			
%	f. t.	%	f. t.
95.8	10.0	30.3	60.0
90.2	30.0	3.9	70.0
71.2	50.0	0	72.3
N,N-Diphenylstearamide (C ₃₀ H ₄₅ ON) + Butyl alcohol (C ₄ H ₁₀ O)			
Ralston, Hoerr and Pool, 1943			
%	f. t.	%	f. t.
95.4	10.0	3.9	70.0
87.9	30.0	0	72.3
59.5	50.0		
p,p'-Tetramethyldiaminobenzophenone (C ₁₇ H ₂₀ ON ₂) + Menthol (C ₁₀ H ₂₀ O)			
Pfeiffer, 1924			
%	f. t.	%	f. t.
100	41	68.4	119
99	42	57.1	129
97	56	50.5	153
96.2	62	40.6	140
95.4	73	30.8	149
92.9	83	26.1	152
90.2	88	19.3	158
83.9	103		

Anisidine-o (C ₇ H ₉ ON) + Glycol (C ₂ H ₆ O ₂)			
Lecat, 1949			
%		b. t.	
0	229.0		
59	193.5 Az		
100	197.4		
o-Anisidine (C ₇ H ₉ ON) + Glycerol (C ₃ H ₈ O ₃)			
Parvatiker and Mc Ewen, 1924			
%		sat. t.	% sat. t.
26.91	142.5	56.43	143.0
38.75	145.0	65.75	141.0
48.31	144.5		
Anisidine-o (C ₇ H ₉ ON) + Menthol (C ₁₀ H ₂₀ O)			
Lecat, 1949			
%		b. t.	
0	229.0		
4	216.0 Az		
100	216.3		
Lecat, 1949			
Phenetidine-o (C ₈ H ₁₁ ON) (b. t.=232.5) + Alcohols.			
2 nd comp.		Az	
Name	Formula	b. t.	% b. t.
Glycol	(C ₂ H ₆ O ₂)	197.4	66.8 194.8
Decyl alcohol	(C ₁₀ H ₂₂ O)	232.8	48 232.0
Diglycol	(C ₄ H ₁₀ O ₃)	245.5	18 225.0
Butoxy diglycol	(C ₈ H ₁₈ O ₃)	232.1	48 226.0
Phenetidine-p (C ₈ H ₁₁ ON) + Glycol (C ₂ H ₆ O ₂)			
Lecat, 1949			
%		b. t.	
0	249.9		
97	197.35 Az		
100	197.4		

Phenetidine-p ($C_8H_{11}ON$) + Diglycol ($C_4H_{10}O_2$)

Lecat, 1949

%	b. t.
0	249.9
52	232.0 Az
100	245.5

Phenacetine ($C_{10}H_{13}O_2N$) + Menthol ($C_{10}H_{20}O$)

Adamanis, 1933

mol%	f. t.	mol%	f. t.
0	135	58.4	107.0
5.7	129.0	63.2	102.0
11.3	127.5	68.0	99.5
16.8	126.0	72.8	96.0
22.3	124.0	77.5	90.0
27.6	122.0	82.1	85.0
32.9	118.5	86.7	79.5
38.2	116.5	91.2	70.5
43.3	115.0	95.6	52.0
48.4	112.0	100	42.5
53.4	108.5		

E: 97.2 mol% 40.0°

Phenacetine ($C_{10}H_{13}O_2N$) + Quinine ($C_{20}H_{24}O_2N_2$)

Adamanis, 1933

mol%	f. t.	mol%	f. t.
0	135	40.3	137.0
2.8	133.5	45.3	142.0
5.8	131.0	50.6	144.5
9.1	130.0	56.3	148.0
12.1	129.0	62.3	151.0
15.6	128.0	68.9	155.0
19.1	126.8	75.8	158.0
22.9	123.5	83.3	163.0
26.9	124.0	91.3	166.0
31.1	128.5	100	175
35.6	132.0		

E: 24.9 mol% 121.5°

Phenacetine ($C_{10}H_{13}O_2N$) + Lactophenine ($C_{11}H_{15}O_2N$)

Kofler, 1944 (fig.)

%	f. t.	%	f. t.
100	118	60	100
80	109	40	114
70	102	20	125
65	96	0	135

Diphenylurea ($C_{13}H_{11}ON_2$) + Borneol ($C_{10}H_{18}O$)

Medard, 1931

%	f. t.	%	f. t.
0	72.3	45	42.25
10	64	47.5	60
20	60	50	68
30	50.5	55	82
40	42.25		

Allyl phenyl thiourea ($C_{10}H_{12}N_2S$) + Methyl alcohol (CH_4O)

Shishokin, 1929

mol%	f. t.	mol%	f. t.
0.0	99	61.63	71.7
22.55	91	71.87	65.7
29.21	86.5	80.76	59.5
42.37	81.5	93.01	46.0
51.30	77.2	95.43	40.0

Allyl phenyl thiourea ($C_{10}H_{12}N_2S$) + Ethyl alcohol (C_2H_6O)

Shishokin, 1929

mol%	f. t.	mol%	f. t.
0.0	99	68.51	70.2
21.26	91	73.37	68.8
32.17	86.7	78.56	64.8
36.43	84.8	83.45	61.3
50.46	78.7	89.84	55.2
53.43	77.5	95.15	44.7
58.84	74.5		

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Mannitol
($C_6H_{14}O_6$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	146	145	50	152	128
10	143	128	60	157	"
19.5	138	"	70	160	"
30	135	"	80	163	"
40	145	"	100	166	163

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Chloral hydrate
($C_2H_3O_2Cl_3$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	146.2	145	66	86	85
20	127	88	70	87.5	"
30	114	"	75	85	41
40	99.5	"	80	78.5	"
46	92	"	90	50	"
50	93	"	95	48	"
60	93	85	100	51.5	49
(1+1)	(2+1)				

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Cholesterol
($C_{27}H_{46}O$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	146	145	51	144	141
10	145	143	60	145	141
20	144	142	80	145.5	142
30	141	141	100	146	144
40	143	141			

Brandstätter, 1943

%	f. t.	%	f. t.
100	148	50	146 (1+1)
97.5	145	40	144 "
96.25	141.5 E	35	143 "
95	145	34	142 E
90	151 (1+1)	30	143
85	152 "	20	144
80	152 "	10	145
70	151 "	0	147
60	149 "		

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Menthol
($C_{10}H_{20}O$)

Pfeiffer and Angern, 1926

%	f. t.	E°	%	f. t.	E
0	146	144	70	115.5	38
20	143	40	80	98	38
30	138	40	90	66	38
40	132	39	95	40	38
50	128	38	98	42	38
60	122	38	100	44	43

Morpholine (C_4H_9ON) + Ethyl alcohol (C_2H_6O)

Wheeler Jr. and Houle, 1954

%	n_D	%	n_D
25°			
0	1.4528	60.2	1.3973
10.9	1.4430	70.8	1.3872
21.2	1.4337	80.1	1.3786
29.2	1.4267	89.1	1.3700
44.7	1.4121	100.0	1.3593
53.4	1.4040		

Antipyrine ($C_{11}H_{12}ON_2$) + Cetyl alcohol ($C_{16}H_{34}O$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	41.5	40	95
90	44	30	99.2
80	58	20	102.5
70	78	10	105.4
60	85	0	108.5
50	90		

Antipyrine ($C_{11}H_{12}ON_2$) + Mannitol ($C_6H_{14}O_6$)

Regenbogen, 1918

wt %	mol %	f. t.	E
100	100	160.7	-
90	90.3	158.9	-
80	80.5	157.8	-
70	70.7	156.8	-
63.5	64.2	154	-
60	60.8	153.1	-
54.5	55.3	150	99
50	50.8	152.0	100
45	45.8	150	100
40	40.8	146	100
36	36.7	145	-
30	30.7	138	-
20	20.5	129	101.5
10	10.3	103	-
0	0	108.5	-

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	112	110	50	161	104
5	107	104	60	162	"
10	120	"	66.6	163	"
20	148	"	80	164	"
30	155	"	100	166	163
40	159	"			

Antipyrine ($C_{11}H_{12}ON_2$) + Chloral hydrate
($C_2H_5O_2Cl_3$)

Tsakalotos, 1913

mol%	f. t.	mol%	f. t.
100	51.6	55.17	57.2
96.55	43.3	54.16	59.1
96.12	39.9	50	62.3
85.21	33.8	49.84	62.3
79.15	44.7	47.76	61.7
72.62	56.0	44.25	57.5
72.09	56.8	36.20	57.2
66.20	61.8	25.49	77.7
62.18	60.2	0	108.9
57.42	57.3		

(2+1)

Regenbogen, 1918

mol%	gr%	f. t.	mol%	gr%	f. t.
100	100	49.0	53.2	50.0	60.0
91.1	90.0	38.4	50.0	46.8	62.7
85.9	84.3	27	48.2	45.0	61.2
82.8	90.9	26	43.6	40.5	55.0
80.4	78.3	36.3	39.5	36.5	49.0
75.3	72.8	52.0	32.5	29.8	58
68.8	66.0	60.5	50.6	28.0	66
65.7	63.8	61.8	22.1	20.0	88
64.1	61.1	60.9	11.2	10.0	101
58.7	55.6	57.3	0	0	109.0
56.2	53.0	57.2			

Antipyrine ($C_{11}H_{12}ON_2$) + Butyl chloral hydrate
($C_4H_7O_2Cl_3$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	68.8	61.1	57.8
90	58.5	60.9	61
80	-	58.9	60
72.3	-	57.4	62.5
81.2	45	56.5	62.1
70	50	53.8	64.0
69	52	50.7	63.8
68.4	54	47.1	62.5
67.3	56	43.2	58.0
67.3	53	34.8	59.0
65	58	30.0	74
64.8	50	20	94
64.4	53.2	10	102
64.2	58	0	109
63	51.9		

(1+1)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	112	110	60	69	56
11	105	66	70	63	"
20	97	"	80	61	"
30	85	"	85	64	"
38	73	"	90	68	"
43	68	"	100	77	72
50	70	"			

(1+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Menthol ($C_{10}H_{20}O$)

Regenbogen, 1918

%	f. t.	E	%	f. t.
100	41.4	-	55.6	71
93.8	37.6	-	50.3	78.5
89.6	35.9	-	45.3	85
85.7	33.7	32.5	43.2	88
84.1	35	32.5	37.3	93.5
76.9	44	-	30	95
71.2	53	32.9	20	103.5
68.4	56.5	32.5	10	105.5
65.1	59	-	0	108.5
60.2	66	-		

Adamanis, 1933

mol%	f. t.	mol%	f. t.
0	112	59.5	72.5
6.0	106.0	64.4	68.0
11.8	104.0	69.1	61.5
17.5	101.5	73.8	53.5
23.1	99.0	78.3	45.5
28.6	95.5	82.8	39.5
34.0	93.5	87.2	35.0
39.4	89.2	91.6	39.5
44.5	87.0	95.8	41.0
49.6	83.0	100	42.5
54.6	79.0		

E: 83.7 mol% 33.0°

Quercigh and Cavagnari, 1912

E: 90% 29.5°

Angeletti, 1928

E: 81.1% 33°

Antipyrine ($C_{11}H_{12}ON_2$) + Cholesterol ($C_{27}H_{46}O$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	112	110	50	107	100
10	110	103	60	110	102
20	108	101	70	116	108
30	107	100	80	126	119.5
41	106.5	100	100	146	144

Brandstätter, 1943

%	f. t.	%	f. t.
0	111	50	105
10	109	60	114
20	107	70	122
30	106	80	130
40	104.5	90	139
45	103	100	148

E: 47% 102°

Antipyrine ($C_{11}H_{12}ON_2$) + Benzyl alcohol (C_7H_8O)

Regenbogen, 1918

%	f. t.	%	f. t.
59.5	-15	33.8	63
55.4	+2	25.4	77
49.4	22	18.8	100.5
41.5	41.5	0	108.5

Antipyrine ($C_{11}H_{12}ON_2$) + Neoorthoform ($C_8H_9O_3N$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	112	110	50	90	86
10	105	70	54	88	"
20	95	"	60	93	"
30	78	"	70	115	"
35	80	"	80	128	"
40	88	"	90	137	"
47	91	86	100	142	139

(1+1)

Acetyl amino antipyrine ($C_{15}H_{15}O_2N_2$) +
Neoorthoform ($C_8H_9O_3N$)

Pfeiffer and Seydel, 1928

%	f. t.	m. t.	%	f. t.	m. t.
0	200	198	55	98	92
20	179	92	60	108	"
30	165	"	70	124	"
40	145	"	81	133	"
50	113	"	100	142	139

Amygdalin ($C_{20}H_{27}O_{11}N$) + Menthol ($C_{10}H_{20}O$)

Eisenlohr and Meier, 1938

mol%	f. t.	E	tr. t.
0	214	-	-
27	192	186	-
34	202	"	-
40	209	"	-
50	212	-	-
56	211	-	-
62	209	-	-
67	205	-	-
75	202	-	33
90	"	-	"
94	"	-	"
98	"	-	"
100	"	-	-

Pyramidon ($C_{13}H_{17}ON_3$) + Butylchloral hydrate
($C_4H_7O_2Cl_3$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	107.5	106	60	76	58
10	103	78	70	65	"
20	93	"	80	64	"
30	79.5	"	90	71	"
40	83	"	100	71	72
50	82	70			

(1+1)

Pyramidon ($C_{13}H_{17}ON_3$) + Cholesterol ($C_{27}H_{46}O$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	108	107	50	105	91
10	106	91	60	114	"
20	101.5	"	70	122	"
30	95	"	80	130	"
40	97	"	100	146	144

Pyramidon ($C_{13}H_{17}ON_3$) + Neoorthoform ($C_8H_9O_3N$)

Pfeiffer and Seydel, 1928

%	E	f. t.	%	E	f. t.
0	106	107.5	41	55	73
10	55	99	43	"	78
20	"	89	50	"	96
30	"	75	60	"	115
37	"	59	80	"	134
39	-	65	100	139	142

Fuchsine ($C_{22}H_{25}O_2N_3$) + Ethyl alcohol (C_2H_6O)

Christiansen, 1870

spectral lines	n
81.2% at room temp.	
B	1.450
C	.502
D	.561
F	.312
G	.285
H	.312

Betaine ($C_5H_{11}O_2N$) + Methyl alcohol (CH_4O)

Stolzenberg, 1914

%	f. t.	%	f. t.
72.38	-9.2	60.14	41
71.46	-8.7	58.39	54
64.79	+21.1	58.27	52.4
64.58	21	54.82	71
60.52	41	55.62	71

Betaine ($C_5H_{11}O_2N$) + Ethyl alcohol (C_2H_6O)

Stolzenberg, 1914

%	f. t.	%	f. t.
94.62	-2	85.31	55
94.45	-2	85.55	54.7
92.09	+18.3	80.62	79
88.44	41.5	80.10	79
87.98	42.5		

Hyoscyamine ($C_{17}H_{23}ON_3$) + Ethyl alcohol (C_2H_6O)

Hammerschmidt, 1889

%	d	(α) _D	%	d	(α) _D
20°					
98.5930	0.79329	-20.98	90.9015	0.81496	21.17
97.6067	.79662	20.53	89.3793	.81818	21.18
95.6096	.80120	21.12	87.5704	.82540	21.23
95.3955	.80218	20.95	85.4310	.83139	21.17
91.8405	.81122	21.14			

Cytisine ($C_{11}H_{14}ON_2$) + Methyl alcohol (CH_4O)

Rauwerda, 1900

%	d	(α) _D
17°		
10	0.8372	-117.53
20	.8748	111.10
32	.9253	103.10

Cytisine ($C_{11}H_{14}ON_2$) + Ethyl alcohol (C_2H_6O)

Rauwerda, 1900

%	d	(α) _D	
	17°	15°	
2	0.8055	-107.30	
10	.8350	101	
20	.8754	92.30	
%	f. t.	%	f. t.
76.1	8	56.1	15
66.5	26	46.2	30

Methyl cytosine ($C_{12}H_{16}ON_2$) + Methyl alcohol (CH_4O)

Rauwerda, 1900

%	f. t.		
31.5	18		
27.6	30		
%	d	(α) _D	
	17°	21°	
95	0.8066	-198	
90	.8266	193.5	
80	.8642	183.30	
60	.9306	164.23	

Methyl cytosine ($C_{12}H_{16}ON_2$) + Ethyl alcohol (C_2H_6O)

Rauwerda, 1900

%	f. t.		
46.2	18		
38.9	30		
%	d	(α) _D	
	17°	18.5°	
95	0.8101	-170.13	
90	.8287	167	
80	.8647	161.5	
70	.8952	154.53	

1-leucine methyl ether hydrochloride ($C_7H_{16}O_2NCl$) + Methyl alcohol (CH_4O)

Takahashi and Yaginama, 1930

%	f. t.	%	f. t.
59	-20	18	98 tr. t.
55	-10	17	80
51	0	14	90
48	10	12	100
42	20	10	110
38	30	7.5	120
34	40	5	130
29	50	2	140
25	60	0	150
22	70		

1-leucine ethyl ether hydrochloride ($C_8H_{18}O_2NCl$) + ethyl alcohol (C_2H_6O)

Takahashi and Yaginama, 1930

%	f. t.	%	f. t.
78	-20	37	60
73	-10	33	70
69	0	29	80
64	10	22	90
58	20	19	100
54	30	13	110
48	40	8	120
42	50	2	130
40	52	0	140

1-leucine propyl ether hydrochloride ($C_9H_{20}O_2NCl$) + Propyl alcohol (C_3H_8O)

Takahashi and Yaginama, 1930

%	f. t.	%	f. t.
84	-20	45	60
79	-10	40	70
73	0	34	80
71	5.3	29	90
69	10	22	100
64	20	17	110
59	30	10	120
60	40	5	130

Phenylglyoxalphenylhydrazone ($C_{14}H_{12}ON_2$) + Ethyl alcohol (C_2H_6O)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
0	128.5	60.5	93.5
9.8	113.5	80.4	83.4
25.1	103.4	91.2	70.0
44.8	98.0		

Laurylamine acetate ($C_{14}H_{29}O_2N$) + Ethyl alcohol
(C_2H_6O)
Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
65	12	30	38
60	16	24	43
50	23	0	69.5
40	31		

Tridecylamine acetate ($C_{15}H_{31}O_2N$) + Ethyl alcohol
(C_2H_6O)
Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
60	13	30	36
50	19	24	40
40	27	0	67.5

Tetradecylamine acetate ($C_{16}H_{33}O_2N$)
+ Ethyl alcohol (C_2H_6O)
Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
80	14	40	39
70	21	30	47
60	27	25	50
50	33	0	76

Pentadecylamine acetate ($C_{17}H_{35}O_2N$)
+ Ethyl alcohol (C_2H_6O)
Harwood, Ralston and Selby, 1941 (fig.)

%	f. t.	%	f. t.
80	14	40	38
70	21	30	46
60	27	25	49
50	33	0	76.5

Cetylamine acetate ($C_{18}H_{39}O_2N$) + Ethyl alcohol
(C_2H_6O)
Harwood, Ralston and Selby, 1941

% f. t.			% f. t.		
I		II	I		II
90	-	17	60	24	36
80	-	25	50	28,5	43
79,5	12	-	40	35	48
70	18	31	30	41,5	54

Heptadecylamine acetate ($C_{19}H_{41}O_2N$)
+ Ethyl alcohol (C_2H_6O)
Harwood, Ralston and Selby, 1941

%	f. t.	%	f. t.
90	19	50	43
80	27	40	48
70	33	30	54
60	37	0	82.5

Octadecylamine acetate ($C_{20}H_{43}O_2N$)
+ Ethyl alcohol (C_2H_6O)
Harwood, Ralston and Selby, 1941 (fig.)

% f. t.			% f. t.		
I	II		I	II	
90	17	28	50	39	48
80	25	35	40	44	52.5
70	30	39	30	-	58
60	35	44	25	-	61

Anabasine hydrochloride ($C_{10}H_{15}N_2Cl$)
+ Ethyl alcohol (C_2H_6O)
Anabasine hydroiodide ($C_{10}H_{15}N_2I$)

Sadikov, Otroshchenko and Malikov, 1955

% HCl	f. t.	% HI	f. t.
70.04	0	95.82	0
60.00	20	94.1	20
39.74	78	88.91	78

Aphyllidine hydrochloride ($C_{15}H_{23}ON_2Cl$)
+ Ethyl alcohol (C_2H_6O)
Aphyllidine hydroiodide ($C_{15}H_{23}ON_2I$)

Sadikov, Otroshchenko and Malikov, 1955

% HCl	f. t.	% HI	f. t.
85.19	0	85.26	0
79.53	20	78.73	20
57.70	78	27.28	78

Ethyl nitrite ($C_2H_5O_2N$) + Methyl mercaptan (CH_3S)

Lecat, 1949

%	b.t.	
0	17.4	
82	6.4	Az
100	6.8	

Methylnitrate (CH_3O_3N) (b.t.=64.8°) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt min.
Methyl alcohol	CH_4O	64.65	27 80	52.5 -	-2.5
Ethyl alcohol	C_2H_6O	78.3	36	59.5	-
Isopropyl alcohol	C_3H_8O	82.42	22	62.5	-
Tert. butyl alcohol	$C_4H_{10}O$	82.45	16	63.6	-

Ethyl nitrate ($C_2H_5O_3N$) (b.t.=87.7°) + Alcohols

Lecat, 1949

2 nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt min
Methyl alcohol	CH_4O	64.65	57 82	61.77 -	- -1.6
Ethyl alcohol	C_2H_6O	78.3	44 79	71.85 -	- -2.2
Propyl alcohol	C_3H_8O	97.2	23 30	- 82.55	-4.3 -
Isopropyl alcohol	C_3H_8O	82.4	45 47	- 77.0	-8.5 -
Butyl alcohol	$C_4H_{10}O$	117.8	4 10	87.45 -	- -3.7
Isobutyl alcohol	$C_4H_{10}O$	108.0	6.7 14.0	- 86.4	-4.2 -
sec. Butyl alcohol	$C_4H_{10}O$	99.5	10 22	- 84.8	-3.6 -
tert. Butyl alcohol	$C_4H_{10}O$	82.45	55	78.1	-
tert. Amyl alcohol	$C_5H_{12}O$	102.35	5	87.0	-1.8
Allyl alcohol	C_3H_6O	96.85	15 22.5	- 83.15	-4.6 -

Ethyl nitrate ($C_2H_5O_3N$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc		(α)				
		red	yellow	green	pale blue	dark blue viol
40.213	-3.23	-3.78	-4.18	-4.14	-4.08	-3.96
25.1065	-2.23	-2.19	-2.07	-1.95	-1.79	-
12.5533	-1.51	-1.35	-1.04	-0.48	-0.16	-
4.868	-0.21	0.00	+0.82	+2.47	+3.70	+4.93
2.434	0.00	+0.41	+0.82	+2.47	+3.70	-

Propyl nitrate ($C_3H_7O_3N$) (b.t.=110.5) + Alcohols

Lecat, 1949

2 nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Ethyl alcohol	C_2H_6O	78.3	- 90	75.0 -	- -1.5
Propyl alcohol	C_3H_8O	97.2	70	93.7	-
Isopropyl alcohol	C_3H_8O	82.4	-	81.5	-
Butyl alcohol	$C_4H_{10}O$	117.8	32	106.5	-
Isobutyl alcohol	$C_4H_{10}O$	108.0	53	103.5	-
Isoamyl alcohol	$C_5H_{12}O$	131.9	-	110.0	-
tert. Amyl alcohol	$C_5H_{12}O$	102.35	77	100.1	-
2-Pentanol	$C_5H_{12}O$	119.8	10	108.0	-
Methoxy-glycol	$C_3H_8O_2$	124.5	20	108.0	-

Lecat, 1949					
Isobutyl nitrate (C ₄ H ₉ O ₃ N) (b.t.= 123.5) + Alcohols.					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Butyl alcohol	C ₄ H ₁₀ O	117.8	55 70	112.8 -	- -4.5
Isobutyl alcohol	C ₄ H ₁₀ O	208.0	64 70	105.6 -	- -4.7
Amyl alcohol	C ₅ H ₁₂ O	138.2	10 -	- 122.0	-2.0 -
Isoamyl alcohol	C ₅ H ₁₂ O	131.9	25 26	- 120.0	-5.5 -
Pentanol-2	C ₅ H ₁₂ O	119.8	50 52	- 115.3	-5.5 -
Ethoxyglycol	C ₄ H ₁₀ O ₂	135.3	18	121.0	-
Methoxyglycol	C ₃ H ₈ O ₂	124.5	44	115.0	-
Cyclopentanol	C ₅ H ₁₀ O	140.85	-	122.2	-

Lecat, 1949					
Isoamyl nitrate (C ₅ H ₁₁ O ₃ N) (b.t.= 149.75) + Alcohols.					
2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Hexyl alcohol	C ₆ H ₁₄ O	157.85	11	148.0	-
Cyclohexanol	C ₆ H ₁₂ O	160.8	-	148.0	-
Methyl lactate	C ₄ H ₈ O ₃	143.8	65	141.2	-3.8 (50%)
Ethyl lactate	C ₅ H ₁₀ O ₃	154.1	33	146.7	-1.6 (11%)
Furfuryl alcohol	C ₅ H ₆ O ₂	169.35	-	149.6	-
Ethoxyglycol	C ₄ H ₁₀ O ₂	135.3	72	133.7	-
Propoxyglycol	C ₅ H ₁₂ O ₂	151.35	43	143.5	-

Nitromethane (CH ₃ O ₂ N) + Methyl alcohol (CH ₄ O)				
Joukovsky, 1933				
mol%	p ₁	p ₂	p	
30°				
100	0	160.2	160.2	
80.5	26.5	139.5	166.0	
77.7	28.2	137.8	166.0	
65.1	34.3	129.6	164.0	
52.6	38.2	120.8	159.0	
43.5	39.5	115.5	155.0	
20.9	42.5	90.5	133.0	
10.2	46.5	54.5	101.0	
0	47.6	0	47.6	
Az : 90 mol % 30.0°				
mol%				
L	V			
30.0°				
30	72.8			
52.6	76.0			
57.6	78.0			
80.5	84.0			

Desseigne and Belliot, 1952				
%		b.t.		
L	V			
100	100	64.7		
93.3	93	64.63		
87.5	87.5	64.55		
73.6	81	64.85		
58.3	79	65.3		
41.2	76	66.2		
25.7	72.7	67.5		
19	67	68.9		
12	62.5	71.5		
6.6	60	78		
3.4	57	83.9		
2.3	-	89.9		
0	0	100.8		
%		n _D	%	n _D
20°				
100	1.3312	19	1.3724	
93.3	.3338	12	.3770	
87.5	.3365	6.6	.3804	
73.6	.3428	3.4	.3823	
58.3	.3503	2.3	.3832	
41.2	.3593	0	.3844	
25.7	.3686			

Joukovsky, 1933				
mol%	n_{He}	j	mol%	n_{He}
16°				
100	1.33023	43.8	1.36493	
81.6	.34351	35.9	.36878	
60.7	.35629	18.8	.37635	
56.3	.35869	0	.38386	
Lecat, 1949				
Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) (b.t.= 101.2) + Alcohols.				
2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Dt mix. or Sat.t.				
Methyl alcohol	CH_4O	64.65	89	-
			92	64.5
Ethyl alcohol	$\text{C}_2\text{H}_6\text{O}$	78.3	73.2	76.95
			91.4	-
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	97.2	54	91.1
			55	-
Isopropyl alcohol	$\text{C}_3\text{H}_8\text{O}$	82.45	69	79.4
			73	-
Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	117.8	30	97.8
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	108.0	40	-
			43.5	94.6
Sec. "	$\text{C}_4\text{H}_{10}\text{O}$	99.5	54	91.1
			55	-
Tert. "	$\text{C}_4\text{H}_{10}\text{O}$	82.45	68	79.4
Isoamyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	131.9	12	100.6
			20	-
Isoamyl alc. sec.	$\text{C}_5\text{H}_{12}\text{O}$	112.9	37	96.4
2-Pentanol	$\text{C}_5\text{H}_{12}\text{O}$	119.8	27	98.5
			28	-
3-Pentanol	$\text{C}_5\text{H}_{12}\text{O}$	116.0	32	97.4
Tert. Amyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	102.35	50.5	93.1
Allyl alcohol	$\text{C}_3\text{H}_6\text{O}$	96.85	57	89.3

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)				
Wagner, 1903				
%	d	η (alcohol=1)		
15°				
0	-	0.5385		
13.44	1.06964	.5003		
28.75	.00814	.5143		
47.92	.93804	.5704		
71.77	.86532	.7037		
85.27	.82924	.8210		
92.469	.81092	.9015		
Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Propyl alcohol ($\text{C}_3\text{H}_8\text{O}$)				
Fowler and Hunt, 1941				
%	d			
L	V	L	V	
25°				
12.7	26.9	1.0721	1.0131	
16.7	32.4	1.0549	0.9931	
27.5	41.2	1.0109	.9653	
33.0	44.3	0.9909	.9531	
43.7	49.3	.9546	.9368	
52.7	52.6	.9256	.9259	
63.5	56.9	.8936	.9128	
70.6	60.0	.8742	.9036	
78.7	65.2	.8527	.8889	
88.4	75.1	.8279	.8622	
93.2	82.7	.8162	.8425	
Az : 52.5% 89.3°				
Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Isopropyl alcohol ($\text{C}_3\text{H}_8\text{O}$)				
Schumacher and Hunt, 1942				
%	%			
L	V	L	V	
2.90	17.3	58.1	66.4	
6.40	32.0	58.6	66.9	
11.9	42.7	62.5	67.9	
17.5	48.5	66.6	69.3	
17.8	49.3	66.8	69.4	
24.2	53.6	70.5	71.2	
24.7	54.3	74.3	73.1	
31.9	57.4	77.5	75.2	
41.5	60.1	78.5	75.5	
42.1	61.8	81.7	77.5	
47.6	63.7	85.1	79.9	
47.9	63.0	88.1	82.4	
53.4	65.0	91.0	85.0	
Az = 71.8% 79.3°				

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Methyl malate 1 ($\text{C}_6\text{H}_{10}\text{O}_5$)

Grossmann and Landau, 1910

g/100 cc	red	yellow	green ^(α)	pale blue	dark blue	viol.
20°						
50.070	-3.34	-3.81	-4.33	-4.59	-4.67	-4.45
25.035	-2.92	-3.75	-3.87	-3.63	-3.44	-
12.5175	-2.64	-3.28	-3.67	-3.52	-3.36	-
4.843	-2.27	-3.10	-2.89	-2.68	-2.48	-2.06
2.4215	-2.06	-1.65	-1.24	-0.83	-0.41	-

 Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Butanethiol ($\text{C}_4\text{H}_{10}\text{S}$)

Lecat, 1949

%	b. t.
0	101.2
72	93.2 Az
100	97.5

Lecat, 1949

 Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) (b. t. = 114.2) + Alcohols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	97.2	77 80	95.0 -	- -7.8
Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	117.8	45 50	107.7 -	- -7.2
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	108.0	60	102.5	-6.5
Amyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	138.2	17	137.8	-
Tert. Amyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	102.35	70 75	98.6 -	- -3.0
Isobutyl carbinol	$\text{C}_5\text{H}_{12}\text{O}$	131.9	22 25	112.0 -	- -7.0

 Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Decyl alcohol ($\text{C}_{10}\text{H}_{22}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	sat. t.
6.6	0.0	-
14.5	-	10.0
100	6.88	-

 Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Dodecyl alcohol ($\text{C}_{12}\text{H}_{26}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.9	0.0
4.0	10.0
16.8	20.0
100	23.95

 Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Tetradecyl alcohol ($\text{C}_{14}\text{H}_{30}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
below 0.1	10.0
1.9	20.0
12.7	30.0
100	38.26

 Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Cetyl alcohol ($\text{C}_{16}\text{H}_{34}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
below 0.1	20.0
1.6	30.0
11.8	40.0
100	49.62

Nitroethane ($C_2H_5O_2N$) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
below 0.1	30.0
2.6	40.0
20.3	50.0
100	57.98

Nitroglycerin ($C_3H_5O_9N_3$) + Methyl alcohol
Hyde, 1912 (CH_4O)

%	D b.t.
85.08	+0.55
81.92	1.21
57.11	2.01
47.30	2.56

Nitroglycerin ($C_3H_5O_9N_3$) + Pentaerythritol
Hackel, 1936 ($C_5H_{12}O_4$)

%	f.t.	E.
I		
100.0	140.3	-
70.0	127.9	-
59.7	121.8	13.5
49.8	115.5	"
39.8	108.7	"
30.0	99.8	13.0
19.9	90.2	"
14.9	81.3	12.7
10.0	69.2	12.3
7.5	59.3	12.4
5.0	49.8	12.20
2.5	36.6	12.25
1.0	12.3	12.25
0.0	12.9	-
II		
40.0	103.0	0.5
21.2	91.3	1.0
10.3	69.7	0.0
2.5	34.2	1.1
1.1	-	1.3
0.0	1.9	-

Nitropentaerythritol ($C_5H_8O_{12}N_4$) + Glycerol
($C_3H_8O_3$)

Urbanski and Galas, 1939

Explosion velocity .

Nitropentaerythritol ($C_5H_8O_{12}N_4$) + Isoamyl alcohol
($C_5H_{12}O$)

Urbanski and Galas, 1939 (fig.)

%	Explosion velocity (m/sec.)
0	6950
5	7000
10	7350
20	7050
30	7280

hexogene ($C_8H_{16}O_6N_6$) + Isoamyl alcohol ($C_5H_{12}O$)

Urbanski and Galas, 1939

Explosion velocity

Hexogene ($C_8H_{16}O_6N_6$) + Glycerol ($C_3H_8O_3$)

Urbanski and Galas, 1939

%	Explosion velocity (m/sec.)
0	7550
10	7350
20	7500
30	7380
40	7550

Nitrocyclohexane ($C_6H_{11}O_2N$) + Methoxydiglycol
($C_5H_{12}O_3$)

Lecat, 1949

%	b.t.
0	205.4
-	192.7 Az
100	192.95

Nitrocyclohexane ($C_6H_{11}O_2N$) + Isoamyl lactate
($C_8H_{16}O_3$)

Lecat, 1949

%	b.t.
0	205.4
72	201.0 Az
100	202.4

Chlorpicrine ($\text{C}_6\text{H}_5\text{O}_2\text{NCl}_3$) (b.t.=111.9) + Alcohols

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt.mix
Ethyl alcohol	$\text{C}_2\text{H}_6\text{O}$	78.3	66 85	77.5 -	- -0.4
Propyl alcohol	$\text{C}_3\text{H}_8\text{O}$	97.2	41.5 93	94.05 -	- -1.2
Isopropyl-alcohol	$\text{C}_3\text{H}_8\text{O}$	82.4	65	81.95	-3.5
Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	117.8	20 25	106.65 -	- -0.9
Isobutyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	108.0	32 40	102.05 -	- -3.2
Sec. Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	99.5	40	96.1	-2.8
Tert. Butyl alcohol	$\text{C}_4\text{H}_{10}\text{O}$	82.45	63	82.25	-
Isoamyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	131.9	7.0 20	111.15 -	- -1.7
2-Pentanol	$\text{C}_5\text{H}_{12}\text{O}$	119.8	17	208.0	-
3-Pentanol	$\text{C}_5\text{H}_{12}\text{O}$	116.0	18	107.3	-
Methyl-isopropyl-carbinol	$\text{C}_5\text{H}_{12}\text{O}$	112.9	20	106.5	-
Tert. Amyl alcohol	$\text{C}_5\text{H}_{12}\text{O}$	102.35	35	98.9	-
Allyl alcohol	$\text{C}_3\text{H}_6\text{O}$	96.85	40 44	- 94.2	-3.0
Methoxy-glycol	$\text{C}_3\text{H}_8\text{O}_2$	124.5	18	110.5	-
Ethylen-chlorhydrin	$\text{C}_2\text{H}_5\text{OCl}$	128.6	8 15	- 108.9	-2.3 -
Chlor-1-Propanol-2	$\text{C}_3\text{H}_7\text{OCl}$	127.0	4	111.6	-

Methylborate ($\text{C}_3\text{H}_9\text{O}_3\text{B}$) (b.t.=68.7) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Methyl alcohol	(CH_4O)	64.65	32	54.6	-5
Ethyl alcohol	($\text{C}_2\text{H}_6\text{O}$)	78.3	25	63.0	-1.0
Tert. Butyl alcohol	($\text{C}_4\text{H}_{10}\text{O}$)	82.45	25	66.0	-

Nitrobenzene ($\text{C}_6\text{H}_5\text{O}_2\text{N}$) + Methyl alcohol (CH_4O)

Jones and Veazey, 1908

%	η	$\tau \cdot 10^4$
	0°	25°
100	903	608
75	1054	703
50	1411	902
25	1929	1842

Fischler, 1913

%	vol%	d	η
		25°	
100	100	0.7860	560.8
66.34	75	.8945	676.6
39.65	50	.9988	857.0
17.96	25	1.0990	1145.0
0	0	.1965	1812.6

Munter, 1931

%	d	n_D
	20.0°	
0	1.20222	1.55253
36.582	1.01673	.45124
50.994	0.95662	.41757
72.859	0.87598	.37433
100	0.79059	.32872

Nitrobenzene ($\text{C}_6\text{H}_5\text{O}_2\text{N}$) + Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$)

Raoult, 1890

mol%	p	mol%	r
96.039	730.2	85.399	675.2
92.274	704.1	82.570	665.5
88.606	684.9	80.080	657.3

Ampola and Carlinfanti, 1895

%	f.t.	%	f.t.
0	3.84	6.43	0.06
0.40	3.33	8.50	-0.41
1.15	2.52	14.82	-1.40
3.43	1.095	21.87	-2.21
4.68	0.62	31.66	-3.00

Graffunder and Heymann, 1931

mol%	d	mol%	d
25°			
0	1.1925	84.07	0.8905
16.35	.1540	94.06	.8260
42.98	.0760	100	.7850
63.75	.0000		

Jones and Veazey, 1908

%	η		$\tau \cdot 10^4$
	0°	25°	
100	2108	1144	337
75	1912	1134	274
50	2049	1209	278
25	2274	1365	266
0	3059	1842	264

Hirata, 1908

vol%	η (alcohol=1)	vol%	η (alcohol=1)
25°			
75	1.0230	96.875	1.0074
87.5	.0078	98.4375	.0058
93.75	.0062	99.21875	.0074

Graffunder and Heymann, 1931

mol%	ϵ	mol%	ϵ
25°			
0	35.22	84.07	25.80
16.35	32.88	94.06	25.10
42.98	29.71	100	24.69
63.75	27.54		

Scharf, 1932

vol%	$(\alpha) 5893 \text{ \AA}$ magn.	vol%	$(\alpha) 5893 \text{ \AA}$ magn.
20°			
100.00	1.870	39.65	2.868
81.78	2.032	29.42	3.009
79.49	.201	10.89	3.173
70.21	.355	10.02	3.362
59.56	.532	0.00	3.517
49.46	.680		

Walker and Henderson, 1902

c	U	Q mix.
110.78	0.457	-612
288.8	.415	-1090
653	.379	-1629
3580	.348	-2851
9204	.342	-3156
18328	.341	-3330

c = g Nitrobenzene for 1 mol. gr. Alcohol.

Nitrobenzene ($C_6H_5NO_2$) + Isopropyl alcohol
(C_3H_8O)

Ampola and Carlinfanti, 1895

%	f. t.	%	f. t.
0	3.84	3.97	1.15
0.26	3.52	6.39	0.42
0.78	3.00	13.71	-0.86
1.80	2.26	20.66	-1.54
2.79	1.71	34.41	-2.37

Nitrobenzene ($C_6H_5NO_2$) + sec. Butyl alcohol
($C_4H_{10}O$)

Roland, 1928

mol%	P_2	mol%	P_2
29.96°			
100	24.2	45.05	19.9
76.60	22.3	26.24	18.9
66.43	21.2	9.39	15.4
39.9°			
100	45.0	44.45	36.0
76.41	39.9	25.71	32.5
66.01	39.3	9.16	24.8
49.7°			
100	79.5	43.56	61.7
76.16	68.2	24.89	54.4
63.39	65.7	8.86	37.5

Veltmans, 1926

%	d	$(\alpha) D$	%	d	$(\alpha) D$
20°					
0	1.2025	0	60	0.9290	8.27
16	.1155	2.37	80	.8637	10.90
39.9	.0060	5.62	100	.8069	13.87

Nitrobenzene ($C_6H_5NO_2$) + Butyl alcohol ($C_4H_{10}O$)

Swearingen and Heck, 1934

mol%	η					
	35°	45°	55°	65°	75°	80°
0	1601	1327	1124	980	878	827
5	1453	1252	1081	946	847	805
10	1403	1196	1035	906	810	770
20	1350	1147	986	854	760	722
40	1339	1109	931	802	706	665
60	1411	1128	949	807	687	633
80	1580	1270	1013	836	711	660
100	2024	1553	1223	994	810	733

 Nitrobenzene ($C_6H_5NO_2$) + Isobutyl alcohol
($C_4H_{10}O$)

Ampola and Carlinfanti, 1895

%	f. t.	%	f. t.
0	+3.84	5.55	+0.85
0.36	3.49	11.93	-0.27
1.05	2.90	21.04	-1.00
2.14	2.19	33.13	-1.18
3.33	1.64		

Wagner, 1903

%	d	η (alcohol=1)
	15°	
0	-	0.5493
13.82	1.12532	.4891
29.71	.04846	.5022
40.13	.00300	.5277
66.74	0.90273	.6372
82.38	.85226	.7591

Osipov, Panina and Lempert, 1955

mol%	ϵ	mol%	ϵ
20° (500 kilohertz)			
0	36	60	22.5
20	30	80	20
40	25.5	100	18.5

Efremov, 1928

mol%	d		
	9.4°	25°	45°
0	1.2132	1.1987	1.1787
5.00	.1963	.1794	.1448
9.96	.1777	.1601	.1311
17.30	.1511	.1338	.0999
21.03	.1370	.1205	.0849
25.20	.1212	.1050	.0704
30.00	.1024	.0855	.0519
34.70	.0838	.0670	.0337
39.03	.0690	.0518	.0175
44.05	.0500	.0329	0.9989
51.02	.0240	.0047	.9714
57.00	0.9996	0.9809	.9475
63.50	.9733	.9533	.9240
67.90	.9512	.9350	.9050
70.92	.9417	.9231	.8932
75.51	.9220	.9041	.8748
79.00	.9054	.8900	.8602
84.04	.8857	.8690	.8372
86.70	.8713	.8570	.8250
90.20	.8575	.8425	.8096
92.03	.8479	.8328	.7996
96.04	.8287	.8163	.7915
98.21	.8175	.8056	.7886
100	.8107	.7990	.7853
	65°	85°	105°
0	1.1603	1.1397	1.1208
5.00	.1250	.1043	.0825
9.96	.1049	.0847	.0637
17.30	.0773	.0575	.0369
21.03	.0633	.0437	.0235
25.20	.0501	.0294	.0101
30.00	.0313	.0107	0.9902
34.70	.0135	0.9914	.9714
39.03	0.9970	.9751	.9550
44.05	.9785	.9555	.9369
51.02	.9519	.9307	.9102
57.00	.9288	.9060	.8856
63.50	.9037	.8811	.8606
67.90	.8851	.8625	.8431
70.92	.8730	.8519	.8320
75.51	.8550	.8348	.8146
79.00	.8402	.8208	.8020
84.04	.8181	.8002	.7797
86.70	.8062	.7892	.7694
90.20	.7900	.7737	.7570
92.03	.7816	.7648	.7485
96.04	.7757	.7597	.7325
98.21	.7707	.7501	.7296
100	.7680	.7485	.7282

Efremov, 1928

mol%	wt%	9.4°	η 25°	45°
0	0	2500	1837	1292
7.84	5.00	2373	1765	1292
15.59	9.96	2290	1710	1259
25.76	17.30	2231	1652	1218
30.64	21.03	2218	1637	1181
35.89	25.20	2235	1633	1177
41.60	30.00	2261	1640	1162
46.90	34.70	2297	1645	1156
51.53	39.03	2355	1664	1158
56.83	44.05	2402	1697	1162
63.36	51.02	2503	1737	1183
68.73	57.00	2620	1780	1219
74.31	63.50	2778	1853	1263
77.85	67.90	2887	1922	1317
80.96	70.92	2981	1975	1342
83.66	75.51	3150	2065	1398
86.22	79.00	3310	2149	1429
89.69	84.04	3575	2350	1516
91.53	86.70	3756	2482	1575
93.89	90.20	4054	2663	1660
95.09	92.03	4232	2760	1692
97.59	96.04	4835	2888	1791
98.91	98.21	5162	3050	1803
100	100	5670	3320	1847

mol%	η 65°	85°	105°
0	1003	781	655
7.84	954	737	637
15.59	915	700	600
25.76	873	660	560
30.64	860	636	540
35.89	840	621	518
41.60	824	606	502
46.90	820	588	478
51.53	812	545	469
56.83	800	571	452
63.36	797	560	439
68.73	798	558	437
74.31	803	550	423
77.85	810	560	422
80.96	819	564	421
83.66	838	580	423
86.22	851	597	437
89.69	885	617	442
91.53	918	623	450
93.89	948	638	456
95.09	978	646	460
97.59	1032	666	470
98.91	1062	687	480
100	1097	698	483

Nitrobenzene ($C_6H_5NO_2$) + Isoamyl alcohol ($C_5H_{12}O$)

Drucker and Kassel, 1911

%	d	η	%	d	η
80°			0°		
100	0.7636	807	100	0.8253	8834
90.02	.7914	816	90.02	.8541	7236
70.03	.8497	749	70.01	.9166	5263
49.96	.9151	697	50.00	.9866	4211
30.03	.9943	694	29.98	1.0703	3344
10.06	.0875	746	9.94	.1664	2865
0	.1444	831	0.00	.2206	3028

Nitrobenzene ($C_6H_5O_2N$) + Capryl alcohol ($C_8H_{18}O$)

Ampola and Carlinfanti, 1895

%	f.t.	%	f.t.
0	+3.84	5.12	1.49
0.34	3.61	7.76	0.51
1.14	3.19	14.05	-1.36
2.44	2.53	20.34	-2.87
3.59	2.08	29.40	-5.05

Nitrobenzene ($C_6H_5O_2N$) + Glycerol diethyl ether
($C_7H_{16}O_2$)

Ampola and Carlinfanti, 1895

%	f.t.	%	f.t.
0	+3.84	8.93	+0.68
0.45	3.64	12.40	-0.48
2.51	2.82	17.38	-1.70
4.10	2.27	22.12	-3.54
6.31	1.46	30.97	-6.80

Lecat, 1949

Nitrobenzene ($C_6H_5O_2N$) (v.t. = 210.75) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t. Dt mix. or Sat.t.	
Glycol	$C_2H_6O_2$	197.4	59	185.9	120.2
Diglycol	$C_4H_{10}O_3$	245.5	10	210.0	-
			50	-	+0.5
Menthol	$C_{10}H_{20}O$	216.3	32.3	208.35	20
Borneol	$C_{10}H_{18}O$	215.0	42	207.8	82
1-Terpineol	$C_{10}H_{18}O$	218.85	13	-	-35
			22	209.7	-
2-Terpineol	$C_{10}H_{18}O$	210.5	20	-	-4.0
Benzyl carbinol	$C_8H_{10}O$	219.4	8	210.6	-
			25	-	-3.2
Benzyl alcohol	C_7H_8O	205.25	50	-	-4.6
			62	204.2	-

Nitrobenzene ($C_6H_5NO_2$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.814	-3.91	-4.66	-5.42	-6.10	-6.40	-6.62
24.907	-3.53	-4.38	-5.10	-5.66	-5.90	-
12.4535	-3.37	-4.18	-5.06	-5.62	-5.86	-
4.839	-3.41	-4.75	-6.20	-7.03	-7.65	-7.65
2.4195	-2.89	-4.13	-5.37	-4.55	-3.72	-

Nitrobenzene ($C_6H_5O_2N$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	d
0%			
19.1	1.20444	68.7	1.1562
50.0	.17433	100.0	.1252
2.00164%			
20.0	1.20317	68.5	1.1566
39.6	.18416	99.0	.1253
4.99917%			
19.0	1.20392	62.7	1.1607
37.3	.18589	98.5	.1248
10.0011%			
18.0	1.20428	74.3	1.1488
47.3	.17526	100.0	.1232
19.9446%			
17.3	1.20442	79.4	1.1427
36.5	.18532	100.0	.1219
63.0	.1589		
50.0156%			
18.7	1.20314	66.7	1.1544
37.7	.18384	100.0	.1207
100%			
19.3	1.2064	131.2	1.0919
33.83	.19181	173.8	.0507
57.35	.1677		

t	(α) _D	t	(α) _D
2.00164%			
16.1	38.68	56.1	33.93
27.4	37.88	78.4	31.36
39.3	36.40	86.8	30.29
44.1	35.65	100.0	28.51
48.1	35.06		
4.99917%			
15.5	35.41	65.5	30.89
20.7	34.91	72.5	30.29
24.6	34.69	82.4	29.60
27.7	34.41	87.4	28.88
44.7	32.84	100.0	27.93
50.8	32.22		
10.0011%			
14.2	31.53	43.7	30.35
17.2	31.58	51.3	29.96
19.8	31.60	58.8	29.55
21.3	31.55	74.7	28.39
23.3	31.43	82.7	27.9
29.0	31.18	100.0	26.27
19.9446%			
17.6	26.07	53.8	26.76
25.3	26.16	67.3	25.47
39.8	26.07	81.0	25.04
44.7	26.06	100.0	24.26

50.0156%			
17.7	16.88	63.3	18.72
32.0	17.66	71.7	18.88
45.9	18.25	78.6	18.97
55.1	18.51	100.0	19.08
100%			
17.8	7.64	124	14.35
35.3	9.39	143	14.75
60.4	11.45	160	14.95
92.9	13.28	175.0	14.99

Rule, Barnett and Cunningham, 1933			
mol%	(α) 5461		
20°			
3.1	2.53		
18.7	8.82		
56.2	11.93		
73.6	11.42		

Lowry and Dickson, 1915				
%	(α)			
	6708 Å	5893 Å	5780 Å	5461 Å
20°				
100	6.69	7.45	7.52	7.50
20	19.32	24.45	26.02	29.01

Patterson and Montgomery, 1909			
19.925 vol%	20°	Dv = +0.20%	
50 vol%	20°	Dt = -1.2°	

Nitrobenzene (C ₆ H ₅ O ₂ N) + Cyclohexanol (C ₆ H ₁₂ O)			
Angla, 1949			
c	n _D	c	n _D
18°			
0	1.5541	30.04	1.5310
4.60	.5492	40.50	.5255
12.00	.5430	60.16	.5178
21.12	.5362	100	.4620
c = g cyclohexanol in 100 cc nitrobenzene.			

Nitrobenzene (C ₆ H ₅ O ₂ N) + Menthol (C ₁₀ H ₂₀ O)			
Scheuer, 1910			
%	mol%	f.t.	E
0	0	5.7	-
0.45	0.36	5.45	-
1.38	1.09	5.0	-
2.55	2.02	4.5	-
3.90	3.10	4.0	-
5.91	4.72	3.35	-
7.81	6.26	2.85	-
9.29	7.47	2.65	-
10.88	8.78	4.65	2.60
13.19	10.70	8.25	"
14.77	12.01	10.15	"
16.46	13.43	12.15	-
18.99	15.59	14.5	-
22.13	18.30	16.2	-
23.71	19.67	17.5	-
26.53	22.15	18.8	-
30.09	24.77	20.2	-
31.49	26.59	20.65	-
35.15	29.94	22.0	-
35.58	30.33	22.8	-
38.06	33.63	22.8	-
41.11	35.49	23.25	-
44.53	38.76	23.8	-
49.52	43.60	24.8	-
49.65	43.72	24.85	-
54.26	48.32	25.7	-
56.88	50.97	26.1	-
58.71	52.84	26.5	-
64.08	58.42	27.4	-
69.30	64.00	28.3	-
72.04	67.00	28.9	-
73.67	68.80	29.5	-
76.32	71.76	30.3	-
79.06	74.85	31.0	-
81.72	78.89	31.85	-
84.46	81.07	32.75	-
86.22	84.33	33.9	-
88.80	86.20	34.3	-
90.95	88.79	35.2	-
92.63	90.83	36.7	-
94.60	93.25	39.6	-
97.26	96.43	40.3	-
100	100	42	-

Dahms, 1895			
%	f. t.	%	f. t.
0	5.55	35.52	23.67
2.22	4.41	38.19	24.31
5.07	3.31	43.40	25.25
6.8	2.8	49.91	26.36
7.10	2.7	61.23	28.31
7.77	6.04	70.06	30.21
11.34	11.21	73.90	31.15
14.95	14.70	82.52	33.45
19.34	17.80	90.05	36.46
23.79	20.12	96.13	39.41
30.03	22.19	100	41.89

Scheuer, 1910					
%	mol%	d			
		55.6°	74.6°	82.2°	99.0°
0	0	1.1661	1.1477	1.1407	1.1255
11.33	9.15	.1215	.1028	.0951	.0786
36.12	30.84	.0374	.0202	.0127	0.9968
51.11	45.17	0.9915	0.9730	0.9688	.9545
68.61	63.27	.9442	.9282	.9215	.9065
86.73	83.74	.9011	.8874	.8801	.8652
100	100	.8693	.8551	.8496	.8372

%	mol%	η			
		55.6°	74.6°	82.2°	99.0°
0	0	1050	783	728	581
11.33	9.15	1001	749	672	534
36.12	30.84	1340	982	857	663
51.11	45.17	1858	1149	980	732
68.61	63.27	2107	1195	1000	698
86.73	83.74	3734	1542	1168	730
100	100	6290	2469	1850	1041

Patterson and Taylor, 1905			
t	d	t	d
1.4539%			
19.25	1.19796	28.93	1.1885
20	.19723	43.2	.1745
2.05718%			
19.6	1.19152	31.7	1.18324
20	.19474	41.7	.17352
6.6542%			
17.05	1.17858	24.42	1.17142
20	.17573	47.15	.1495
30.4894%			
19.6	1.0888	41.2	1.0690
20	.08848	54.1	.0571
31.6	.0777		

 | t | (α) _D | t | (α) _D | |----------|---------------------------|------|---------------------------| | 1.4539% | | | | | 22.5 | -47.00 | 32.9 | -46.80 | | 2.05718% | | | | | 8.5 | -47.63 | 39.0 | -46.21 | | 24.0 | 46.89 | | | | 6.6542% | | | | | 9.8 | -47.37 | 67.2 | -45.84 | | 25.3 | -46.63 | 78.7 | -45.65 | | 46.4 | -46.29 | | | | 30.4894% | | | | | 19.1 | -47.30 | 25.9 | -46.98 | | 22.7 | -47.10 | 29.7 | -46.84 | | Scheuer, 1910 | | | | | |---------------|----------|---------|---------|---------| | % | (α) | | | | | | dark red | D | yellow | green | | | | | 76.75° | | | 11.33 | -28.928 | -46.141 | -47.995 | -54.572 | | 36.12 | -37.610 | -47.148 | -49.154 | -55.882 | | 51.11 | -38.193 | -47.996 | -50.024 | -56.718 | | 68.61 | -39.944 | -49.216 | -51.252 | -58.186 | | 86.73 | -39.267 | -49.361 | -51.458 | -58.356 | | 100 | -40.149 | -50.155 | -52.385 | -59.419 | | Nitrobenzene (C ₆ H ₅ NO ₂) + Benzyl alcohol (C ₇ H ₈ O) | | | | |--|-------|-------|-------| | Ampola and Carlinfanti, 1895 | | | | | % | f. t. | % | f. t. | | 0 | +3.84 | 17.20 | -2.44 | | 0.62 | 3.46 | 23.74 | -4.36 | | 1.88 | 2.76 | 30.23 | -6.22 | | 3.88 | 1.82 | 37.23 | -8.10 | | 6.81 | 0.62 | | | | Nitrobenzene (C ₆ H ₅ NO ₂) + Cinnamic alcohol (C ₉ H ₁₀ O) | | | | |---|-------|-------|-------| | Ampola and Carlinfanti, 1895 | | | | | % | f. t. | % | f. t. | | 0 | +3.84 | 4.99 | 1.70 | | 0.54 | 3.50 | 8.24 | 0.76 | | 1.82 | 2.94 | 12.97 | -0.51 | | 2.87 | 2.49 | 20.47 | -2.44 | | 3.97 | 2.06 | | | |

o-Dinitrobenzene ($C_6H_4O_4N_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	(α) _D
25.03%	
116.1	35.16
134.2	32.05
142.4	30.95

o-Dinitrobenzene ($C_6H_4O_4N_2$) + Triphenyl carbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
0.0	116.5	49.3	118.5
4.5	115.0	51.1	120.0
9.0	113.5	59.5	127.0
14.2	111.0	64.4	132.0
18.0	109.0	70.8	136.0
20.1	105.0	75.3	141.0
29.6	104.0	84.6	147.0
36.7	105.0	99.9	154.0
40.8	111.0	100	159.5
44.7	113.5		

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	(α) _D
24.172%			
83.8	1.3043	81.5	18.16
		94.7	17.84
		112.0	17.53
49.611%			
68.5	1.2565	63.3	15.59
82.5	1.2425	89.3	16.03
99.4	1.2251	124.6	16.22
		149.2	16.06

For 100%, see: Nitrobenzene + Ethyl tartrate

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
0.0	89.0	55.2	129.8
4.3	87.8	62.5	135.0
9.9	86.0	63.0	135.0
15.1	84.0	68.3	139.0
19.5	85.0	75.3	143.1
24.4	98.5	82.8	148.5
29.8	107.0	90.8	153.0
33.8	111.5	96.4	157.0
40.9	118.0	100	159.5
47.8	124.0		

p-Dinitrobenzene ($C_6H_4O_4N_2$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
0.0	171.0	55.9	140.0
6.3	170.0	56.8	139.5
13.8	168.0	58.9	137.0
18.3	166.0	60.5	135.5
24.6	163.0	61.4	135.0
29.9	160.0	65.5	133.0
34.2	157.5	70.1	136.0
36.6	155.0	74.6	140.0
40.6	153.0	81.5	146.0
44.2	150.0	88.0	150.5
46.5	148.0	95.6	156.0
52.1	143.0	100.0	159.5

Trinitrobenzene sym. ($C_6H_3O_6N_3$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	(α) _D	t	(α) _D
24.933%		51.38%	
104.0	-11.26	95.9	-1.56
114.0	-8.44	117.0	+2.30
129.2	-4.76	127.4	+4.01
146.4	-1.12		

For 100% , see: Nitrobenzene + Ethyl tartrate.

Trinitrobenzene sym. ($C_6H_3O_6N_3$) + Triphenylcarbinol ($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f.t.	%	f.t.
0.0	121.5	53.7	136.0
5.5	119.0	53.8	136.6
13.1	114.0	60.6	140.0
21.1	118.0	64.7	142.0
28.9	124.0	70.7	145.0
37.0	131.0	79.4	148.0
43.4	134.0	85.9	151.0
47.5	133.0	93.9	155.0
47.7	133.0	100.0	159.0
50.4	134.0		

$E_1: 112^\circ$ $E_2: 133^\circ$ (3+2)

o-Nitrotoluene ($C_7H_7O_2N$) + Ethyl alcohol (C_2H_6O)

Burrows and Eastwood, 1923

%	d	%	d
30°			
0	0.78100	30.99	0.87101
3.14	.78972	51.97	.94148
14.22	.82051	100	1.154

Wagner, 1903

c	d	η (alcohol=1)
15°		
Nitrotoluene	-	1.8373
40.6182	0.92469	.0621
20.3091	.85950	.0135
10.1546	.82613	.0028
5.0773	.80936	.0144
2.6386	.80129	.0027

c = g nitrotoluene in 100 cc alcohol.

o-Nitrotoluene ($C_7H_7O_2N$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.073	-3.77	-4.51	-4.97	-5.43	-5.65	-5.87
25.0365	-3.40	-4.19	-4.55	-4.75	-4.95	-
12.5183	-3.04	-3.67	-4.15	-4.39	-4.47	-
5.255	-2.47	-3.24	-3.81	-4.19	-4.39	-4.38
2.6275	-1.52	-2.28	-3.04	-3.81	-3.81	-

o-Nitrotoluene ($C_7H_7O_2N$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	d
0%			
16.0	1.16742	58.0	1.1275
40.0	.14472	100.5	.1377
5.00243%			
12.0	1.17186	63.0	1.1235
39.5	.14588	101.0	.10871
10.0023%			
14.1	1.17129	62.6	1.1247
42.0	.14456	100.1	.0878
25.0094%			
15	1.17509	60	1.1313
38	.1530	101	.0915
50.21%			
19.4	1.18013	57.1	1.1427
35.0	.16466	101.6	.0980
t	$(\alpha)_D$	t	$(\alpha)_D$
5.00243%			
10.1	37.88	54.1	32.18
14.7	37.26	63.0	31.24
23.9	35.99	67.3	30.7
39.0	33.89	100.0	27.06
48.6	32.75		
10.0023%			
11.5	32.99	49.4	29.77
17.5	32.59	54.1	29.45
24.6	31.84	61.2	28.93
38.6	30.68	100.0	25.54
45.6	30.11		
25.0094%			
10.4	25.03	51.9	24.26
14.6	25.09	56.7	24.14
24.9	24.97	66.3	23.88
38.7	24.70	100.0	22.51
50.21%			
11.0	17.46	52.0	18.54
18.5	17.8	60.4	18.68
23.0	17.86	67.0	18.77
40.9	18.33	100.0	18.83

For 100%, see: Nitrobenzene + Ethyl tartrate

Lecat, 1949

o-Nitrotoluene ($C_7H_7O_2N$) (b.t.= 221.75) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix or Sat.t.
Decyl alcohol	$C_{10}H_{22}O$	232.8	15	221.7	-3.3
Glycol	$C_2H_6O_2$	197.4	48.5	188.35	142.0
Glycerol	$C_3H_8O_3$	290.5	8	220.7	193
Diglycol	$C_4H_{10}O_3$	245.5	17.5	218.2	+0.1
Dipropylene-glycol	$C_6H_{14}O_3$	229.2	53	-	+0.3
			10	-	
Methoxy-triglycol	$C_7H_{16}O_4$	245.25	21	216.9	-0.1
			12	220.8	
Borneol	$C_{10}H_{18}O$	215.0	75	213.5	-
Menthol	$C_{10}H_{20}O$	216.3	66	214.65	26
Citronellol	$C_{10}H_{20}O$	224.2	8	-	-2.5
			19	220.7	
Geraniol	$C_{15}H_{26}O$	229.6	38	219.8	-5.0
1-Terpineol	$C_{15}H_{26}O$	216.85	62	217.1	-
			80	-	-3.9
2-Terpineol	$C_{15}H_{26}O$	210.5	50	-	-5.2
			90	209.7	
Benzyl-carbinol	$C_8H_{10}O$	219.4	57	217.6	-
			60	-	-3.2

m-Nitrotoluene ($C_7H_7O_2N$) + Ethyl alcohol
(C_2H_6O)

Wagner, 1903

c	d	η (alcohol=1)
15°		
Nitrotoluene	-	1.8207
40.5806	0.92324	.0510
20.2903	.85887	.0046
10.1452	.82633	.0006
5.0726	.80955	.9998
2.5363	.80122	.9997
c= g nitrotoluene in 100cc		

Lecat, 1949

m-Nitrotoluene ($C_7H_7O_2N$) (b.t.= 230.8°) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Decyl alcohol	$C_{10}H_{22}O$	232.8	40	228.2	-4.5
Geraniol	$C_{15}H_{26}O$	229.6	50	-	-4.7
			51	227.3	
Glycol	$C_2H_6O_2$	197.4	57	192.5	-
Glycerol	$C_3H_8O_3$	290.5	13	228.8	-
Diglycol	$C_4H_{10}O_3$	245.5	25	224.2	-0.2
Butoxydi-glycol	$C_8H_{18}O_3$	231.2	10	-	-0.2
			30	229.0	
Methoxytri-glycol	$C_7H_{16}O_4$	245.25	23	226.4	-

m-Nitrotoluene ($C_7H_7O_2N$) + Methyl malate 1
($C_5H_8O_5$)

Grossmann and Landau, 1910

g/100 cc		(α)				
		red	yellow	green	pale blue	dark blue
50.845	-3.44	-3.84	-4.48	-4.80	-4.90	-4.86
25.4225	-2.48	-2.95	-3.26	-3.50	-3.46	-
12.6113	-1.97	-2.44	-2.83	-2.60	-2.28	-
4.875	-1.44	-1.64	-1.23	-1.03	-0.82	-0.41
2.4375	-0.41	0.00	+0.41	+0.82	+1.23	-

Lecat, 1949

p-Nitrotoluene ($C_7H_7O_2N$) (b.t. = 238.9°) +
Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Decyl alcohol	$C_{10}H_{22}O$	232.8	67	231.5	-
Geraniol	$C_{15}H_{18}O$	229.6	75	228.8	-
Glycol	$C_2H_6O_2$	197.4	63.5	192.4	141.5
Glycerol	$C_3H_8O_3$	290.5	17	235.6	220
Diglycol	$C_4H_{10}O_3$	238.9	35	228.75	48.5
Dipropylene- $C_6H_{14}O_3$ glycol		229.2	62	225.0	-
Methoxy- triglycol	$C_7H_{16}O_4$	245.25	39	231.2	-
Phenyl- propanol	$C_9H_{12}O$	235.6	60	234.0	-

p-Nitrotoluene ($C_7H_7O_2N$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	d
20.2968%			
53.9	1.1298	93.4	1.0919
72.3	.1120		
48.5%			
45.7	1.1487	77.0	1.1172
64.4	.1300	97.0	.0802
t	(α) _D	t	(α) _D
20.2968%			
45.5	19.48	80.3	20.10
51.6	19.75	95.0	20.03
65.2	20.01		
48.5%			
43.9	14.94	95.2	17.16
70.3	16.35		
For 100%, see: Nitrobenzene + Ethyl tartrate.			

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	(α) _D
24.941%			
72.3	1.2710	63.0	13.88
82.8	.2604	91.3	14.29
100.0	.2433	123.2	14.66

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + Triphenylcarbinol
($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f.t.	%	f.t.
0.0	68.5	52.7	122.0
3.4	67.8	57.4	126.0
7.8	66.0	62.7	131.0
13.6	70.0	68.3	135.0
17.4	79.0	73.1	140.0
22.4	89.0	80.0	145.0
26.4	95.0	81.1	146.0
31.2	100.0	89.0	152.0
37.3	107.0	94.1	155.0
42.8	113.5	100.0	159.5
50.1	119.5		

2,6-Dinitrotoluene ($C_7H_6O_4N_2$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	(α) _D
24.753%			
63.3	1.2792	52.1	22.93
75.5	.2668	61.4	22.6
80.5	.2616	77.7	22.13
		95.6	21.38
		140.2	19.71

2,4,6-Trinitrotoluene ($C_7H_5O_6N_3$) + Ethyl alcohol
(C_2H_6O)

Desvergnès, 1924

%	f.t.	%	f.t.
0.70	0.3	5.73	55.0
1.95	33.0	7.50	59.8
1.89	40.1	10.24	65.0
3.57	45.0	15.67	74.0
4.42	50.0	100	80.6

2,4,6 Trinitrotoluene ($C_7H_5O_6N_3$) +
Triphenylcarbinol ($C_{19}H_{16}O$)

Kremann, Hohl and Müller, 1921

%	f.t.	%	f.t.
100	159.5	42.8	129.5
95.4	156.5	41.8	126.5
93.0	154.5	40.4	127.5
90.1	153.0	38.4	126.0
85.1	150.5	37.2	124.0
84.0	150.0	36.7	123.5
76.2	145.5	31.8	123.0
73.5	143.0	28.6	118.0
69.9	143.0	24.2	116.0
66.5	139.0	25.3	114.0
63.5	139.0	21.9	111.0
62.9	137.0	19.3	110.0
60.1	135.5	19.1	107.0
57.7	136.5	14.8	102.5
54.4	133.0	14.3	97.0
53.8	134.5	11.8	89.0
49.6	132.0	8.8	84.0
48.6	130.0	5.4	78.0
46.2	130.0	3.8	79.0
		0.0	81.0

o-Nitroanisole ($C_7H_7O_3N$) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t	d	t	d
9.79%			
17.7	1.2471	42.9	1.2219
33	.2319	59.7	.2050
21.17%			
14.9	1.2442	53.2	1.2053
35	.2237	66.4	.1919
t	(α) _D	t	(α) _D

9.79%

17.9	30.7	43.3	29.2
20	30.6	53.2	28.3
34.5	29.5	62.8	27.7

21.17%

17.4	25.35	39.3	25.1
20	25.3	50	25.2
29.1	25.4	55.8	24.8

For 100%, see: Nitrobenzene + Ethyl tartrate

p-Nitroanisole ($C_7H_7O_3N$) + Ethyl tartrate
($C_8H_{14}O_6$)
Patterson and Stevenson, 1910

t	d	t	d
53.84% (?)			
35.1	1.2101	48	1.1974
41.4	.2038	57.2	.1883
t	(α) _D	t	(α) _D
26.08%			
52.0	6.082	20	12.5
55.8	6.25	35.1	13.63
64.8	6.515	44.4	14.23
73.6	6.075	51.3	14.58
77	6.078	57.6	14.91

o-Nitrophenetole ($C_8H_9O_3N$) + Ethyl tartrate
($C_8H_{14}O_6$)
Patterson and Stevenson, 1910

t	d	t	d
25.09%			
17.1	1.1896	40.4	1.1659
33.4	.1734	54.3	.1524
39.43%			
14.6	1.1948	33.3	1.1757
25.9	.1833	41	.1680
t	(α) _D	t	(α) _D
25.09%			
18.4	19.11	53.3	20.41
20.	19.2	65.5	20.6
30.6	19.7		
39.43%			
15.9	15.41	29.1	16.27
20	15.75	42	17.06
25.1	16.16		

p-Nitrophenetole ($C_8H_9O_3N$) + Ethyl tartrate
($C_8H_{14}O_6$)
Patterson and Stevenson, 1910

t	(α) _D	t	(α) _D
24.37%			
50.1	3.88	49.4	6.475
57.3	3.995	54.4	6.73
67.3	4.21	66.6	7.175
82.5	4.345	69.7	7.28
100%			
17.8	9.222	124	15.774
35.3	11.174	143	15.926
60.4	13.318	160	15.88
92.9	15.022	175	15.74

o-Nitroaniline ($C_6H_5O_2N_2$) + Ethyl alcohol (C_2H_6O)

Collett and Johnston, 1926

mol%	f.t.	mol%	f.t.
83.86	37.7	33.39	57.6
68.44	47.1	20.73	62.0
52.51	51.7	11.30	65.9
35.70	56.7		

m-Nitroaniline ($C_6H_5O_2N_2$) + Ethyl alcohol (C_2H_6O)

Collett and Johnston, 1926

mol%	f.t.	mol%	f.t.
94.36	50.2	38.68	94.7
88.60	65.9	30.24	98.4
76.75	78.5	17.48	104.6
63.20	85.0	0.0	112.5
54.43	88.7		

p -Nitroaniline ($C_6H_5O_2N_2$) + Ethyl alcohol (C_2H_6O)

Collett and Johnston, 1926

mol%	f.t.	mol%	f.t.
97.55	34.8	55.81	113.7
93.95	66.2	40.26	122.8
83.04	92.0	25.55	132.3
63.41	109.0	16.17	137.2

Nitronaphthalene ($C_{10}H_7O_2N$) + Ethyl alcohol (C_2H_6O)

Campetti, 1917

t	U	t	U
0. %		41.36 %	
40	0.6393	54.2	0.5453
58	0.7024	56.8	0.5480
		61.0	0.5644
61.75 %		100 %	
53.7	0.6034		
56.6	0.6093	40	0.6393
58.1	0.6153	58	0.7024

 α -Nitronaphthalene ($C_{10}H_7O_2N$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson, 1908

t	d	t	d	t	d
10.214 %		25.145 %		49.565 %	
63.9	1.2113	62.4	1.2023	48.9	1.2001
79.0	1.1986	80.0	1.1864	61.6	1.1882
101.0	1.1803	98.7	1.1698	78.5	1.1719
				100.0	1.1517

t (α)_D t (α)_D t (α)_D

10.214 %		25.145 %		49.565 %	
61.4	32.99	58.9	32.99	16.7	24.79
78.0	31.83	78.0	31.83	26.4	24.99
92.6	37.47	96.3	30.71	47.2	24.93
122.8	33.74	123.0	28.78	74.3	24.66
		139.0	27.65	99.8	24.06
				111.6	23.68

For 100 % see : Nitrobenzene + Ethyl tartrate .

Lecat, 1949

o-Chlornitrobenzene ($C_6H_4O_2NCl$) (b.t.= 246.0) + Alcohols.

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Glycol	$C_2H_6O_2$	197.4	68	193.5
Glycerol	$C_3H_8O_3$	290.5	15	242.1
Diglycol	$C_4H_{10}O_3$	245.5	41	233.5

o-Chlornitrobenzene ($C_6H_4O_2NCl$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson and Stevenson, 1910

t	(α) _D	t	(α) _D
25.73%			
24.7	7.7	49.2	7.61
30.55	.654	58	.5
40.55	.638	82.9	.33

For 100%, see : p-Nitrophenetole + Ethyl tartrate.

Lecat, 1949

m-Chlornitrobenzene ($C_6H_4O_2NCl$) (b.t.=235.5) + Alcohols.

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Glycol	$C_2H_6O_2$	197.4	53	192.5
Glycerol	$C_3H_8O_3$	290.5	10	232.2
Diglycol	$C_4H_{10}O_3$	245.5	32	228.2
Dipropylene-glycol	$C_6H_{14}O_3$	229.2	-	227.0

m-Chlornitrobenzene (C ₆ H ₄ NO ₂ Cl) + Ethyl tartrate (C ₈ H ₁₄ O ₆)					
Patterson and Stevenson, 1910					
t		(α)		D	
28.43%					
36.9		5.754			
52.2		5.9			
77.4		6.125			
89.7		6.046			
105.2		6.236			
p-Chlornitrobenzene (C ₆ H ₄ O ₂ NCl) + Methyl alcohol (CH ₄ O)					
Desvergues, 1925					
%		f. t.			
8.019		17			
21.98		50			
p-Chlornitrobenzene (C ₆ H ₄ O ₂ NCl) + Ethyl alcohol (C ₂ H ₆ O)					
Desvergues, 1925					
%		f. t.			
9.493		17			
25.19		50			
p-Chlornitrobenzene (C ₆ H ₄ NO ₂ Cl) + Ethyl tartrate (C ₈ H ₁₄ O ₆)					
Patterson and Stevenson, 1910					
t		(α)		D	
24.26%					
82.1		3.735			
105.2		3.885			
117		4.098			
128.2		4.106			
147.1		4.12			
1-Chlor-2,4-dinitrobenzene (C ₆ H ₃ O ₄ N ₂ Cl) + Methyl alcohol (CH ₄ O)					
Desvergues, 1925					
%		f. t.			
89.90		16			
75.55		32			
1-Chlor-2,4,6-trinitrobenzene (C ₆ H ₂ O ₆ N ₃ Cl) + Methyl alcohol (CH ₄ O)					
Desvergues, 1925					
%		f. t.			
90.71		17			
74.18		50			
Tetra-Butylammonium picrate (C ₂₂ H ₃₉ O ₇ N ₄) + Butyl alcohol (C ₄ H ₉ O)					
Seward, 1951					
%		d	η	%	
91°					
100	609	0.758		24.77	7430
88.61	811	.790		13.59	14630
74.86	1155	.838		6.64	26800
58.71	1933	.894		2.28	40300
38.53	3700	.949		0	58100
%		κ		%	
91°					
100	0			50.31	86.80
99.50	1.62			39.69	90.07
97.91	5.01			30.30	84.63
94.96	10.78			19.25	66.22
90.89	18.92			10.58	43.57
80.87	39.14			3.74	27.21
70.40	59.17			0	18.21
60.19	75.18				

XXXV. OXYGEN-NITROGEN DERIVATIVES + PHENOLS .

Acetamide (C_2H_5ON) + Phenol (C_6H_6O)

Kremann and Wensing, 1917

%	f. t.	E	%	f. t.	E
0.00	76.2	-	60.6	33.8	-
4.75	74.5	-	61.4	33.8	-
14.57	69.5	-	67.2	38.1	-
15.04	68.9	-	70.5	39.7	-
23.5	64.0	62.84	72.9	40.8	-
28.5	60.1	-	77.0	40.8	-
29.4	59.2	-	79.7	40.4	-
34.5	54.5	-	85.2°	35.5	-
40.5	47.5	26.3	86.5	34.5	27.3
40.6	47.5	-	90.8	26.5	-
45.4	40.8	-	93.5	30.5	27.5
50.7	33.5	27.0	95.8	34.8	-
51.5	31.0	27.0	100.0	40.9	-
55.1	28.5	-			

(1+2)

Boon, 1939

mol%	f. t.	mol%	f. t.
0	81.9	55.9	39.1
9.6	76.7	62.3	41.7
20.6	66.4	67.1	42.3
30.9	53.6	74.1	39.9
40.2	35.6	79.1	37.2
42.5	33.3	83.0	33.3
44.9	33.8	88.5	30.0
46.5	34.0	89.5	32.4
48.0	34.6	100	41.0
50.4	35.6		

(1+2)

Dzhelomanova, Rudenko and Dionisyev, 1956

mol%	f. t.	mol%	f. t.
0	79.4	60	40
10	74	70	42
20	62	80	38
30	52	90	30.2 E
40	38	95	38
45	29 E	100	41
50	34		

(1+2)

mol%	65°	d	75°	85°
0	-	-	-	0.99
20	1.03	1.02	1.01	1.01
30	.035	.025	.015	.015
40	.03	.025	.015	.015
50	.035	.030	.02	.02
60	.035	.030	.02	.02
70	.035	.030	.02	.02
80	.035	.030	.025	.025
90	.035	.03	.025	.025
100	.04	.035	.025	.025

mol%	65°	η	75°	85°
0	-	-	-	1300
10	-	-	-	1200
20	3500	2200	1100	1100
30	3100	2000	1000	1000
40	2900	2000	1000	1000
50	2500	2000	1000	1000
60	2300	1900	1000	1000
70	2100	1900	1000	1000
80	2100	1900	1000	1000
90	2100	1900	1000	1000
100	2100	1900	1000	1000

mol%	65°	κ	75°	85°
0	-	-	-	0.40
10	-	0.72	.99	.99
20	0.40	.54	.70	.70
30	.26	.40	.50	.50
40	.20	.24	.38	.38
50	.12	.15	.20	.20
60	.08	.10	.11	.11
70	.03	.05	.06	.06
80	.02	.02	.02	.02

Acetamide (C_2H_5ON) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1918

%	f. t.	E	%	f. t.	E
0	76.5	-	41.1	27	-
3.3	75.5	-	42.4	20	10
11.3	71.3	-	46.4	11	-
16.1	67.5	-	48.6	11	-
17.9	65.7	-	70.80	44	-
22.2	60.9	-	75.46	70	-
23.5	58.4	9	80.55	86	-
28.8	52.5	-	90.38	108.4	-
31.8	46	-	100	126	-
35.9	40	-			

(1+1)

Acetamide (C_2H_5ON) + Pyrocatechol ($C_6H_6O_2$)						Acetamide (C_2H_5ON) + Resorcinol ($C_6H_6O_2$)			
Kremann and Auer, 1918						Kremann and Auer, 1918			
%	f. t.	E	%	f. t.	E	%	f. t.	%	f. t.
100	102.8	-	33.3	53.0	-	100	108.5	38.8	31.0
83.5	77.0	-	29.4	57.0	-	93.8	100.0	33.9	42.5
74.1	48.0	-	23.7	63.0	-	87.4	87.5	27.1	55.0
67.9	23.0	17.4	13.7	68.0	-	81.7	73.5	22.7	61.0
61.3	27.0	17.5	8.6	72.0	-	74.1	47.0	18.0	66.5
55.8	34.0	17.6	6.3	74.0	-	69.4	32.0	14.0	69.0
47.8	37.4	-	1.9	75.4	-	48.2	9.0	8.2	72.5
38.3	44.0	34.5	0	76.5	-	46.0	14.2	4.1	74.5
(2+1)						43.4	20.2	1.4	76.5
Dzhelomanova, Rudenko and Dionisyev, 1956 (fig.)						Dzhelomanova, Rudenko and Dionisyev, 1956 (fig.)			
mol%	f. t.		mol%	f. t.		mol%	f. t.	mol%	f. t.
0	79.4		54	26	E	10	79.4	70	72
10	68		60	54		20	55	80	90
20	50		70	82		30	25	90	105
26	37.6	tr. t.	80	88		60	50	100	110
30	35		90	100					
40	33		100	105					
50	28								
mol%		d				mol%		d	
	80°	95°	110°				95°	105°	115°
10	0.990	0.99	0.97			0	1.00	0.99	0.98
20	1.07	1.05	1.03			10	.02	1.01	1.00
30	.08	.07	.06			20	.06	.05	.04
40	.10	.08	.07			30	.09	.08	.07
50	.12	.11	.09			40	.11	.10	.09
60	.14	.12	.11			50	.14	.13	.12
70	.15	.14	.12			60	.15	.14	.13
80	-	.15	.14			70	.18	.17	.16
100	-	-	.16			80	-	-	.17
						90	-	-	.18
						100	-	-	.19
mol%		η				mol%		η	
	80°	95°	110°				95°	105°	115°
10	1610	1400	1200			0	1500	1200	1000
20	3800	2600	2000			10	2200	2000	1800
30	4500	3100	2200			20	3500	3000	2200
40	5200	3400	2400			30	4300	3500	3000
50	5800	3900	2700			40	5900	4800	3400
60	6100	4000	2800			50	7000	5300	4100
70	6500	4050	2900			60	8900	6500	5000
80	-	3900	2800			70	10800	7500	5500
100	-	-	2400			80	-	-	6000
						90	-	-	6900
						100	-	-	7500
mol%		κ				mol%		κ	
	80°	95°	110°				95°	105°	115°
0	0.40	0.42	0.50			0	0.48	0.49	0.50
10	.60	.65	.77			10	.30	.34	.39
20	.80	.88	.95			20	.18	.24	.28
30	.60	.65	.75			30	.12	.14	.20
40	.50	.55	.60			40	.08	.10	.13
50	.40	.45	.50			50	.04	.05	.10
60	.35	.40	.42			60	.02	.04	.08
70	.20	.25	.30			70	.01	-	.04
80	-	.20	.23			80	.02	.02	.02
90	-	.18	.20						

Acetamide (C ₂ H ₅ ON) + Hydroquinone (p-C ₆ H ₆ O ₂)					
Kremann and Auer, 1918					
%	f.t.	E	%	f.t.	E
100	169	-	54.2	98.0	-
93.6	161.2	-	53.9	98.0	-
85.6	148.0	-	45.1	91.0	-
78.4	133.0	100.2	38.3	81.0	60.3
70.6	113.0	-	33.8	74.0	60.1
68.0	105.0	98.8	29.4	64.0	60.3
66.0	102.0	-	26.1	61.0	60.0
65.9	101.2	-	20.7	65.0	-
61.8	101.0	-	16.3	68.5	-
60.2	100.5	-	9.9	72.0	-
(1+1)			0	76.5	-

Dzhelomanova, Rudenko and Dionisyev, 1956 (fig.)					
mol%	f.t.	mol%	f.t.		
155°					
0	79.4	50	100	tr. t.	
10	73	60	125		
83	65 E	70	140		
20	65	80	155		
30	90	90	165		
40	98	100	171	(1+1)	

mol%	d		
	135°	145°	155°
0	1.8	1.7	1.6
10	1.9	1.8	1.7
20	2.2	1.9	1.8
30	2.2	2.1	2.0
40	2.3	2.1	2.0
50	2.38	2.3	2.25
60	-	-	2.35
70	-	-	2.4

mol%	η		
	135°	145°	155°
0	1000	900	850
10	1210	1050	1000
20	1600	1400	1200
30	1800	1600	1400
40	2200	1800	1600
50	2500	2100	1700
60	-	-	2000
70	-	-	2300

mol%	κ	mol%	κ
155°			
0	0.56	50	0.30
10	.40	60	.29
20	.35	70	.28
30	.34		
40	.32		

 Locat, 1949 | | | | | || Acetamide (C₂H₅ON) (b.t.=221.15) + Phenols. | | | | | |
2nd comp.			Az		
Name	Formula	b.t.	%	b.t.	Sat. t.
o-Xylenol	(C₈H₁₀O)	226.8	4	221.1	-
Thymol	(C₁₀H₁₄O)	232.9	29.5	219.9	69
Carvacrol	(C₁₀H₁₄O)	237.85	-	220.8	-
Guaiacol	(C₇H₈O₂)	205.05	92.5	204.55	20.5
Guethol	(C₇H₈O₂)	216.5	-	215.0	-
Eugenol	(C₁₀H₁₂O₂)	254.8	12	220.8	59.5
o-Chlor-phenol	(C₆H₅OC1)	219.75	67	231.7	-
o-Brom-phenol	(C₆H₅OBr)	199.8	50	223.0	-
o-Nitro-phenol	(C₆H₅O₆N)	217.2	75.8	207.7	43
Methyl-salicylate	(C₈H₈O₃)	222.95	71	205.9	80.0
Ethyl-salicylate	(C₉H₁₀O₃)	233.8	59.8	209.2	103.5
Isoamyl-salicylate	(C₁₂H₁₆O₃)	277.5	30	220.0	-

Acetamide (C ₂ H ₅ ON) + o-Cresol (C ₇ H ₈ O)					
Hrynakowski and Adamanis, 1938					
%	f.t.	%	f.t.		
0	81.6	60	28.0		
10	76.5	70	-		
20	71.8	80	-3.8		
30	65.2	90	+8.2		
40	58.2	100	30.0		
50	45.8				

Acetamide (C ₂ H ₅ ON) + m-Cresol (C ₇ H ₈ O)					
Hrynakowski and Adamanis, 1938					
%	f.t.	E	%	f.t.	E
0	81.6	-	60	33.0	22.5
20	73.5	-	70	22.0	-
30	66.0	-	80	14.5	9.5
40	59.2	22.0	90	-2.5	9.5
50	47.0	21.4	100	4.0	-
(1+1)					

Acetamide (C_2H_5ON) + p-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E	%	f. t.	E
0	81.6	-	60	20.5	-
10	75.8	-	70	21.0	-
20	71.0	-	80	14.5	4.5
30	63.5	20.2	90	17.8	-
40	48.7	20.2	100	37.0	-
50	32.5	19.2			

(1+1)

Acetamide (C_2H_5ON) + o-Nitrophenol ($C_6H_5O_2N$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	44.8	-	58.5	61.5	-
97.6	42.9	41.1	50.6	64.0	-
92.1	43.0	41.1	42.0	66.6	-
84.1	49.0	-	33.2	69.0	-
77.1	53.0	-	21.3	71.5	-
72.3	56.0	-	11.4	73.8	-
65.7	59.0	-	0	76.5	-
62.0	60.6	41.0			

Sorum and Durand, 1952

%	f. t.
0	79.0
-	40.9 E
100	44.8

Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	79.4	60	55
10	78	70	50
20	75	80	45
30	70	85	39.5 E
40	65	90	42
50	60	100	44.3

Acetamide (C_2H_5ON) + m-Nitrophenol ($C_6H_5O_2N$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	95.0	-	55.7	44.3	-
92.2	80.0	-	52.7	43.5	-
81.0	44.0	25.0	47.5	50.0	42.1
76.3	41.0	25.2	41.9	56.1	-
71.3	51.5	-	36.1	61.0	-
65.1	50.4	-	30.0	64.6	-
60.5	47.5	-	23.0	68.2	-
60.7	47.0	-	13.8	72.5	-
55.9	47.5	-	0.0	76.5	-

(1+1)

Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	79.4	50	53.1
10	70	61.5	47.8 E
20	60	70	68
30	50	80	80
31.0	47 E	90	88
40	52	100	96.4

(1+1)

Acetamide (C_2H_5ON) + p-Nitrophenol ($C_6H_5O_2N$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	112.0	-	48.2	82.1	66.1
92.7	95.6	77.2	45.0	79.3	65.9
86.3	79.0	77.5	43.5	78.0	66.1
79.5	89.5	-	36.2	71.2	66.1
74.8	94.7	-	31.4	66.4	-
70.3	96.1	-	25.4	68.0	66.2
65.2	95.2	-	17.4	71.5	66.3
58.0	90.9	-	0.0	76.5	-
51.4	85.5	-			

(1+1)

Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	79.4	60	90
10	70	70	80
13	65 E	71	78 E
20	75	80	98
30	84	90	110
40	90	100	113.2
50	95		

Acetamide (C_2H_5ON) + 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Dzhelomanova, Rudenko and Dionisiev, 1956

mol%	f.t.	mol%	f.t.
0	79.4	50	88
10	74	60	90
20	62	70	100
24	60 E	80	105
30	68	90	110
40	78	100	114.7

Acetamide (C_2H_5ON) + Picric acid ($C_6H_3O_7N_3$)

Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)

mol%	f.t.	mol%	f.t.
0	79.4	50	95
10	60	60	100
20	42	70	105
21	39 E	80	110
30	50	90	115
40	65	100	121.8
43.5	68.8 tr.t.		(1+1)

Pushin and Kozuhar, 1947

mol %	f.t.	E
100	122	-
80	115	-
70	109	-
60	99	40
50	87	38
45	60	35
30	47	38
25	43.5	40
20	50	40
15	58.5	37
10	67	-
5	74	-
0	80	-

Acetamide (C_2H_5ON) + α -Naphthol ($C_{10}H_8O$)

Kremann and Auer, 1918

%	f.t.	E	%	f.t.	E
100	92.0	-	43.8	56.4	-
87.4	68.5	-	36.9	62.0	-
76.5	40.0	9.2	27.9	67.5	-
67.7	12.0	9.4	21.9	70.0	-
62.2	29.8	9.0	15.8	72.0	-
56.6	42.1	-	12.6	73.0	-
49.5	51.1	-	0	76.5	-
44.5	56.0	-			

Acetamide (C_2H_5ON) + β -Naphthol ($C_{10}H_8O$)

Kremann and Auer, 1918

%	f.t.	E	%	f.t.	E
100	122.0	-	51.6	55.5	-
89.3	97.0	-	51.1	55.0	53.1
82.1	78.2	61.4	51.5	55.5	-
83.3	63.0	61.2	43.5	57.0	53.2
68.0	63.0	-	33.9	63.2	53.2
62.8	62.2	-	25.3	67.4	-
58.7	60.0	-	16.9	70.5	-
56.4	58.5	-	12.0	72.4	-
			0	76.5	53.1

(1+1)

Lecat, 1949

Propionamide (C_3H_7ON) (b.t.=222.2) + Phenols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Sat.t.
Methyl salicylate	($C_8H_8O_3$)	222.95	66	210.55	60.2
Ethyl salicylate	($C_9H_{10}O_3$)	233.8	53	214.5	-
p-Chlor-phenol	(C_6H_5OCl)	219.75	67	228.0	-
o-Nitro-phenol	($C_6H_5O_2N$)	217.2	74.5	211.05	45

Urea (CH_4ON_2) + Phenol ($\text{C}_6\text{H}_6\text{O}$)

Philip, 1903

%	f. t.	E	%	f. t.	E
98.0	38.1	-	81.2	59.5	-
96.4	36.0	35.0	76.6	60.4	-
94.8	38.0	35.1	75.0	60.5	-
91.8	47.3	-	74.0	62.8	60.4
85.3	57.0	-	70.6	74.5	60.0
(1+2)					

Kremann and Rodinis, 1906

%	f. t.	%	f. t.
100.0	41.0	75.5	61.0
99.4	40.2	69.6	72.0
96.7	37.0	69.3	73.0
94.5	37.5	64.8	84.0
91.5	43.0	63.9	85.0
91.0	44.0	58.1	95.0
88.4	51.0	57.4	95.0
84.6	55.8	51.8	101.5
82.2	58.0	41.6	110.0
80.6	59.0	32.1	116.5
77.9	60.0	16.5	122.8
76.5	62.0	0.0	129.0
76.2	60.5		
(1+2)			

Rheinboldt, 1925

wt%	mol%	f. t.	E
0.0	0.0	132.0	131.0
9.6	6.4	129.0	61.0
19.4	13.3	125.0	"
25.4	17.9	122.0	"
27.9	19.8	121.0	60.0
33.7	24.5	118.0	"
38.3	28.4	115.0	"
40.9	30.7	113.0	"
41.4	31.1	111.5	"
47.6	36.7	107.5	"
50.3	39.3	104.0	"
52.5	41.4	102.0	"
54.6	43.4	99.0	"
61.6	50.6	90.0	"
69.7	59.5	75.0	"
71.1	61.1	70.0	"
74.5	65.1	60.0	59.5
75.0	65.7	60.5	59.5
78.0	69.4	60.5	34.5
81.5	73.8	59.5	34.0
86.4	80.2	55.0	"
88.5	83.1	52.0	"
91.0	86.6	48.0	"
94.5	91.6	37.0	"
96.7	94.9	37.0	"
100.0	100.0	42.5	42.0
(2+3) (1+2)			

Pushin and König, 1928

mol%	f. t.	E	min.
0	132	-	-
30	113	58	0.9
40	104	"	1.3
45	95	"	1.7
50	87	59	-
55	78	"	2.5
60	70	"	2.6
63	-	"	3.0
65	-	"	3.2
66.6	59	" E	3.2
71	59	-	-
74	58	30	1.5
80	54	33	3.0
85	49	"	3.3
90	41	"	5.7
93.5	-	36 E	-
97	38	-	-
100	40.8	-	-
(1+2)			

Atkins, 1908

(1+2) f. t. = 61°

Dionisiev and Rudenko, 1952

mol%	d	
	120°	135°
90.00	0.9974	0.9898
80.00	1.0103	1.0050
70.00	1.0350	1.0247
60.00	1.0522	1.0412
50.00	1.0776	1.0680
40.00	1.1148	1.1051
30.00	1.1360	1.1254
20.00	1.1751	1.1653
10.00	-	1.1947
η		
90.00	1020	820
80.00	1190	960
70.00	1420	1120
65.00	1560	1300
60.00	1660	1300
55.00	1780	1390
50.00	1900	1500
45.00	2050	1610
40.00	2160	1710
30.00	2390	1910
20.00	2630	2100
10.00	-	2360
κ		
80.00	0.05	0.22
70.00	0.24	0.414
65.00	0.28	0.51
60.00	0.35	0.62
55.00	0.45	0.80
50.00	0.60	0.97
45.00	0.73	1.10
40.00	0.87	1.28
30.00	1.14	1.61
20.00	1.42	1.95
10.00	-	2.28

Urea (CH_4ON_2) + Pyrocatechol ($\text{C}_6\text{H}_6\text{O}_2$)

Van der Hammen, 1931

mol%	f.t.	E	mol%	f.t.	E
I					
100	105.2	-	50	71.3	-
90	95.9	-	46.5	70.1	-
80	86.0	-	45	69.2	66.8
70	72.6	65.2	40	69.3	67.0
67.5	68.0	65.0	30	93.4	66.8
62.5	66.9	65.9	15	118.2	-
60	68.2	65.3	0	132.9	-
55	71.1	-			
II					
60	56.3	-			
57.5	47.6	-			
55	41.5	-			

Pushin and Rikovski, 1932

mol%	f.t.	E	mol%	f.t.	E
100	103	-	50	72.5	-
90	97	-	45	71.5	71
80	89	54	43	71	"
70	76	61	40	76.5	"
65	70	66	35	87	67.5
63	66	66	25	105	62.5
60	68.5	62	15	118	49
55 (1+1)	71.5	62	0	131	-

Dionisiev and Rudenko, 1952

mol%	d	
	120°	135°
90.00	1.1594	1.1482
80.00	.1690	.1561
70.00	.1785	.1684
60.00	.1878	.1740
50.00	.1971	.1840
40.00	.2080	.1928
30.00	.2160	.2090
20.00	.2267	.2128
10.00	-	.2210
	η	
90.00	2500	1920
80.00	2780	2100
70.00	3160	2440
60.00	3590	2780
55.00	3730	2880
52.50	3790	2940
50.00	3840	2980
47.50	3860	3000
45.00	3850	3020
42.50	3840	3010
40.00	3820	3000
30.00	3720	2930
20.00	3610	2840
10.00	-	2760

90.00	1.18	1.63
80.00	1.40	1.88
70.00	1.56	2.05
60.00	1.54	2.16
55.00	1.50	2.18
52.50	1.46	2.20
50.00	1.45	2.23
47.50	1.44	2.23
45.00	1.46	2.22
42.50	1.44	2.24
40.00	1.51	2.26
30.00	1.58	2.41
20.00	1.66	2.54
10.00	-	2.60

Urea (CH_4ON_2) + Resorcinol ($\text{C}_6\text{H}_6\text{O}_2$)

Pushin and König, 1928

mol%	f.t.	E	min.
0	132	-	-
15	116	72	0.4
20	106	85	0.9
25	96.5	85	1.3
30	-	90 E	1.9
35	-	"	1.6
40	98	"	0.9
50	101	-	-
60	97	79	0.6
66.6	93	83	1.4
70	89	83.5	1.7
75	-	84 E	2.4
80	90	80	1.5
90	100	-	-
100	111	-	-
(1+1)			

Van der Hammen, 1931

mol%	f.t.	E	mol%	f.t.	E
100	111.0	-	45	103.5	-
85	95.6	-	40	99.1	-
77.5	86.8	84.1	32.5	93.4	91.1
75	84.5	84.2	30	91.4	91.0
70	89.4	84.1	25	98.6	90.8
55	101.5	-	10	121.8	-
50	104.4	-	0	132.9	-
(1+1)					

Hrynakowski and Adamanis, 1934

mol%	E	f. t.	mol%	E	f. t.
0	-	132.5	40.4	87.0	96.5
2.8	-	127.0	45.5	-	102.0
5.8	-	122.0	50.0	-	104.0
8.9	-	119.0	56.5	-	101.5
12.2	-	115.0	62.5	83.0	99.5
15.6	86.0	110.0	69.0	87.0	94.5
19.2	79.0	105.5	75.9	82.0	85.0
23.0	81.5	102.0	83.3	84.0	93.2
27.0	88.0	94.5	91.4	-	105.0
31.2	81.5	87.0	100	-	110.0
35.7	-	92.5	(1+1)		

Cohen-Adad, 1949

%	f. t.	E	%	f. t.	E
0	131	-	64.7	102.7	-
28.00	113.4	-	85.2	87.7	-
35.00	104.8	92.2	86.00	89.3	87.7
43.00	94.0	91.8	90.00	96.2	88.0
44.7	92.4	-	94.00	101.7	88.2
46.00	93.4	92.4	100.00	109.5	-
(1+1)					

Dionisiev and Rudenko, 1951

mol%	f. t.	mol%	f. t.
0	133	55	101
10	122.5	60	99.4
20	115	70	91
25	88	75	87
26	86.5 E	76	86
27	87.5	77.5	84.8 E
28	89	79	86.1
30	92.8	80	88.6
40	99	85	95
45	101.5	90	101
50	102.5(1+1)	100	110

Dionisiev and Rudenko, 1952

mol%	d	mol%	d
	120°		135°
90	1.1735	40	1.2021
80	.1740	30	.2115
70	.1783	20	.221
60	.189	10	-
50	.1948		

Urea (CH_4ON_2) + Hydroquinone ($\text{C}_6\text{H}_6\text{O}_2$)

Pushin and König, 1928

mol %	f. t.	E	min.
0	132	-	-
10	120	105	0.4
15	114	107	0.9
20	-	110	1.3
30	121	107	0.7
35	124	103	0.4
40	128	-	-
50	130	(1+1)	-
60	127	125	-
70	139	120	-
75	147	121	-
80	153	-	-
100	170	-	-
E ₁ : 20 mol % 110° E ₂ : 63 mol % 125°			

Dionisiev and Rudenko, 1951

mol %	f. t.	mol %	f. t.
0	133	45	127.5
10	122.1	50	(1+1) 129.2
15	116.5	55	128
17.5	114	58	127
20	111.3	59	126.4 E
21	110.5 E	60	127.1
22	111	62.5	130
22.5	112.6	65	134.3
25	115	70	140.1
30	120	80	151
35	122.7	90	161.3
40	126	100	171

Dionisiev and Rudenko, 1952

mol %	120° d	135°	mol %	120° d	135°
75	-	1.1665	40	1.1950	1.1840
70	-	1.1682	30	1.2211	1.1901
65	1.1809	1.1699	20	1.2095	1.1990
60	1.1831	1.1723	10	1.2181	1.2072
50	1.1889	1.1780			

mol %	120° η	135°	mol %	120° η	135°
75	-	2960	50	4140	3020
70	-	3020	45	4040	2960
65	-	3020	40	3980	2940
62.5	4040	3030	30	3750	2790
60	4060	3040	20	3320	2450
55	4100	3050	10	3020	2210

mol %	120° κ	135°	mol %	120° κ	135°
70	-	0.61	40	0.99	1.46
60	0.589	0.84	30	1.21	1.80
55	0.64	0.96	20	1.62	2.25
50	0.71	1.13	10	2.09	2.91
45	0.851	1.26			

Urea (CH_4ON_2) + Orcinol ($\text{C}_7\text{H}_8\text{O}_2$)

Pushin, Lukavetski and Rikovski, 1948

mol%	f. t.	E	mol%	f. t.	E
100	108	-	37.5	103	-
90	99	-	33.3	103.5	-
80	87	-	30	103	-
70	75	75	27.5	102.5	-
60	86	74	25	102	102
55	92	73	20	110	101
50	98	-	15	116	101
45	-	71	10	123	-
40	102.5	-	0	133	-

(2+1)

Urea (CH_4ON_2) + o-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Kremann, 1907

%	f. t.	%	f. t.
0.0	131.5	79.8	75.0
4.5	130.0	79.9	73.0
12.9	128.5	80.9	69.0
24.1	126.9	81.8	63.0
32.1	124.0	82.3	60.0
36.0	123.5	82.4	59.0
38.8	122.5	83.7	58.8
41.5	122.0	84.4	57.7
46.0	120.5	85.6	56.5
50.9	118.0	85.7	55.2
55.4	115.5	87.1	53.5
59.0	112.0	87.4	53.5
62.8	108.0	88.1	51.5
70.0	97.0	88.2	49.5
72.1	96.5	90.2	46.0
74.9	91.0	93.0	37.0
75.6	89.5	97.7	28.5
77.3	84.0	100.0	31.0
77.4	81.5		

Pushin and Sladovic, 1928

mol%	f. t.	E	tr. t.
100	29.5	-	-
95	27.4	21.2	-
90	29.9	25.1	-
85	38	25.9	-
80	51.7	26.1	-
79	53	25.1	-
75	57.2	24.4	-
72	59	22.6	59
70	66	20.5	56.9
66.3	78	24	58.3
60	88.2	-	55
50	105	-	"
40	115	-	"
30	120	-	54
20	122	-	51.3
10	124.5	-	47
0	133	-	-

(1+3)

Urea (CH_4ON_2) + m-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Kremann, 1907

%	f. t.	%	f. t.
0.0	131.5	77.9	79.5
7.7	129.0	82.0	65.0
16.3	126.5	82.8	64.5
28.8	124.0	84.2	63.0
36.4	122.5	86.5	59.6
46.6	119.5	86.7	59.5
49.3	119.0	88.0	52.0
56.8	115.0	89.5	51.5
65.0	106.2	90.4	49.0
68.7	101.3	91.1	45.8
71.0	94.5	92.4	41.5
75.8	86.0	92.5	40.0
77.7	80.2	93.2	35.0

(1+1)

Rudenko and Dionisiev, 1955 (fig.)

mol %	120°	d	130°	140°
0	-	-	-	1:21
10	-	1.20	1.16	1:16
20	-	1.16	1.11	1:11
40	1.10	1.08	1.04	1:04
60	1.08	1.04	1.02	1:02
80	1.04	1.02	0:96	
100	1.03	1.00	0:92	

mol %	120°	η	130°	140°
0	-	-	-	236
20	-	248	225	
40	245	215	195	
60	185	170	155	
80	145	130	115	
100	120	105	95	

mol %	120°	κ	130°	140°
0	-	-	-	3.20
20	-	1.30	1.70	
40	0.40	0.80	1.15	
60	0.10	0.15	0.30	
80	0	0.05	0.10	
100	0	0	0	

Urea (CH_4ON_2) + p-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Kremann, 1907

%	f.t.	%	f.t.	
0.0	131.5	76.0	83.0	
13.4	127.5	77.8	78.0	
28.3	124.0	79.1	74.0	
33.1	122.0	81.2	64.0	
38.9	120.5	81.8	59.5	
42.6	119.0	82.8	57.0	
45.4	119.0	84.3	48.0	
46.7	117.8	85.4	41.0	
51.5	115.5	85.5	36.0	
52.3	115.0	87.2	25.5	
58.7	112.0	87.9	25.0	
60.1	111.0	89.0	24.0	
62.6	109.5	89.3	24.0	
64.0	108.0	89.9	22.0	
68.2	103.0	91.6	22.5	(1+1)
72.0	95.5	93.7	25.5	
72.9	93.5	95.7	28.0	
74.0	90.0	97.0	31.0	
75.8	85.0	100.0	34.5	

Urea (CH_4ON_2) + Guaiacol ($\text{C}_7\text{H}_8\text{O}_2$)

Pushin and König, 1929

mol%	f.t.	E	mol%	f.t.	E
0	132	-	89	61	24
20	122	-	90	29	24
30	119	13	94	34.5	-
40	117	13	96	26	-
60	113	23	98	27	-
65	106	-	100	28	-

(1+1)

Urea (CH_4ON_2) + Thymol ($\text{C}_{10}\text{H}_{14}\text{O}$)

Pushin, Marich and Rikovski, 1948

mol%	f.t.	E
100	51	-
95	118	49.5
90	130	48.5
80	130.5	47
70	131	45
60	132	43
55	131	43
50	131	43.5
40	132	44
30	131	44
20	131.5	-
10	131	42
0	132	-

Urea (CH_4ON_2) + o-Nitrophenol ($\text{C}_6\text{H}_5\text{O}_3\text{N}$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0	131.5	49.7	124.8
2.2	128.0	50.9	126.0
12.3	126.0	59.1	"
22.3	125.0	70.2	"
26.7	124.7	81.7	"
29.1	124.5	97.8	124.0
34.8	"	99.0	93.5
39.1	"	100.0	45.0
44.1	"		

Urea (CH_4ON_2) + m-Nitrophenol ($\text{C}_6\text{H}_5\text{O}_3\text{N}$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0.0	132.0	66.1	88.0
5.1	129.8	69.1	80.5
13.2	127.0	70.8	80.5
23.2	125.5	72.7	80.5
29.5	122.0	75.5	80.0
36.8	120.0	79.2	77.0
42.8	116.0	81.6	74.0
48.2	112.0	86.3	71.0
51.7	108.5	91.2	79.5
52.0	111.0	93.6	85.5
59.2	103.0	96.2	89.5
63.5	95.0	100.0	95.0

Urea (CH_4ON_2) + p-Nitrophenol ($\text{C}_6\text{H}_5\text{O}_3\text{N}$)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0.0	131.5	75.2	115.0
3.3	130.0	78.6	113.5
10.7	127.0	81.3	110.0
20.4	123.8	83.3	106.5
24.9	122.0	84.2	102.0
30.8	119.0	85.7	99.0
34.6	117.0	88.7	89.5
43.6	114.0	91.5	92.5
44.8	106.0	94.0	98.0
60.6	113.5	96.4	104.0
66.5	116.0	98.6	108.0
72.4	116.0	100.0	111.8

(1+1)

Rudenko and Dionissiev, 1954 (fig.)

mol%	f.t.	mol%	f.t.
0	132.7	50	116.2 (1+1)
20	118	60	109
30	110.7 E	80	91.5 E
40	113	100	113.2

mol%	d		
	120°	130°	140°
0	-	-	1.215
10	-	1.240	.230
20	1.265	.255	.240
40	.300	.285	.270
60	.330	.315	.300
80	.360	.350	.330
100	.410	.390	.370

mol%	η		
	120°	130°	140°
0	-	-	2050
10	-	3000	2650
20	4400	3750	3250
40	5250	4400	3800
50	5300	4300	3700
60	5100	4200	3600
80	4400	3700	3100
100	3500	3000	2400

mol%	κ		
	120°	130°	140°
0	-	-	3.0
10	-	2.7	4.0
20	1.4	2.0	3.0
30	1.0	1.5	2.0
40	0.7	1.2	1.7
60	0.4	0.65	1.1
80	0.15	0.35	0.55
100	0	0.10	0.25

Urea (CH_4ON_2) + Salipyryne ($\text{C}_{18}\text{H}_{18}\text{O}_4\text{N}_2$)

Hrynakowski, 1934

E_1 : 41.0% 104.0° E_2 : 87.0% 70.0°
(1+1)

Urea (CH_4ON_2) + 2,4 Dinitrophenol ($\text{C}_6\text{H}_3\text{O}_5\text{N}_2$)

Pushin and Rikovski, 1932

mol%	f.t.	E	mol%	f.t.	E
100	112	-	50	95.5	-
95	110	-	45	94	-
90	108	-	40	92	92
85	106	-	35	97	91
80	104	-	30	100.5	90
75	102.5	-	25	105.5	89
65	100	-	15	115.5	89
60	99	-	0	131	-
55	97	-			

Rudenko and Dionissiev, 1954 (fig.)

mol%	f.t.	mol%	f.t.
0	132.7	50	101
20	112.5	60	95
30	116.4	80	107
40	112	100	114.7
(1+2)			

mol%	d		
	120°	130°	140°
0	-	-	1.205
10	-	1.210	.235
20	1.320	.300	.270
40	.390	.365	.335
60	.460	.440	.410
80	.520	.510	.490
100	.600	.580	.560

mol%	η		
	120°	130°	140°
0	-	-	2000
10	-	5200	4700
20	6600	6100	5700
30	6400	5900	5400
40	5200	4700	4100
60	2800	2200	2000
80	1000	800	600
100	200	100	0

mol%	κ		
	120°	130°	140°
0	-	-	3.3
10	-	8.0	13.3
20	6.1	8.6	11.3
30	4.6	6.0	7.3
40	3.4	4.3	5.4
60	1.7	2.4	3.1
80	0.3	0.7	1.3
100	0	0.1	0.2

Urea (CH_4ON_2) + 2,4,6-Trinitrophenol ($\text{C}_6\text{H}_3\text{O}_7\text{N}_3$)				mol% η			
Rudenko and Dionissiev, 1954				125° 135° 145°			
0	132.7	-	-	0	-	235	190
10	110	360	315	10	360	315	265
17	97.8 E	25	385	25	385	350	310
20	105	40	345	40	345	315	270
29	118	60	290	60	290	265	225
30-75	decomposition	80	230	80	230	215	180
80	132	100	175	100	175	160	135
90	123						
95	116.7 E						
100	121.8						
	(1+1)						
Urea (CH_4ON_2) + α -Naphthol ($\text{C}_{10}\text{H}_8\text{O}$)				mol% κ			
Pushin and König, 1928				150° 140° 130°			
0	132	-	-	0	4.1	3.1	-
20	122	47	0.7	20	1.6	1.3	1.0
33.3	110	56	0.8	40	0.6	0.4	0.2
40	102	59	0.9	60	0.15	0.05	0
50	93	63	1.4	80	0	0	0
60	78	65	1.9	100	0	0	0
70	68	65	2.0				
80	77	53	0.7				
90	88	-	-				
100	95	-	-				
E: 67 mol%	65°						
Urea (CH_4ON_2) + β -Naphthol ($\text{C}_{10}\text{H}_8\text{O}$)				mol% η			
Rudenko and Dionisiev, 1955 (fig.)				125° 135° 145°			
0	132.7	66	107.5	0	-	270	220
20	129	74 E	104	22	-	380	290
40	122	80	108	30	440	360	300
50	114	100	122.4	50	360	310	260
57 E	104			60	325	280	230
				80	260	230	200
				100	220	190	170
Urea (CH_4ON_2) + α -Naphthol ($\text{C}_{10}\text{H}_8\text{O}$)				mol% κ			
Rudenko and Dionisiev, 1955 (fig.)				125° 135° 145°			
0	132	-	-	0	-	2.65	3.35
20	122	47	0.7	20	-	0.75	1.10
33.3	110	56	0.8	40	0.15	0.30	0.40
40	102	59	0.9	60	0.05	0.10	0.15
50	93	63	1.4	100	0	0	0
60	78	65	1.9				
70	68	65	2.0				
80	77	53	0.7				
90	88	-	-				
100	95	-	-				
E: 67 mol%	65°						

Methyl urea ($C_2H_6ON_2$) + Phenol (C_6H_6O)

Kremann, 1910

%	f. t.	%	f. t.
0.0	98.0	71.8	-2.7
6.2	93.0	74.6	-5.0
12.5	89.0	77.7	-6.0
22.0	81.0	80.1	+2.0
27.7	77.0	83.9	13.0
34.0	70.0	84.7	13.0
42.7	55.5	89.7	24.5
50.4	43.0	95.4	34.0
55.0	31.0	100.0	41.0
56.0	25.0		
58.4	16.0		
60.0	8.3		
61.1	7.7		
65.1	4.7		
68.0	2.0		

E : -7° (tr. t. = +8°) (1+1)

Dimethylurea sym. ($C_3H_8ON_2$) + Phenol (C_6H_6O)

Kremann, 1910

%	f. t.	E	%	f. t.	E
0.0	102.0	-	67.2	13.7	-
10.2	93.0	-	68.1	14.0	-
19.3	80.0	-	72.0	14.0	-
28.0	64.0	-	73.2	12.7	-
33.9	48.5	-	76.0	11.3	4.7
39.8	31.0	-	82.7	9.3	5.0
45.3	8.0	-	82.8	8.0	-
51.6	3.7	-3	84.2	14	-
54.7	7	-	84.9	15.0	-
55.9	8.3	-	86.2	18.3	5.3
59.5	10.7	-	91.0	30	-
60.3	11.7	-	100	41	-
67.0	13.3	-			

(1+2)

Dimethylurea asym. ($C_3H_8ON_2$) + Phenol (C_6H_6O)

Kremann, 1910

%	f. t.	%	f. t.
0.0	178	74.2	21
9.2	170	75.7	21.0
17.4	162	77.4	18
25.0	153	79.6	18.0
31.2	144	80.6	9.0
39.2	129	82.6	12.5
46.0	112	83.6	11.0
52.1	92	85.8	16.5
54.7	83	87.5	21.0
58.7	65	90.0	26.0
62.2	47	93.4	32.0
66.5	25	96.7	37.0
69.3	24	100.0	41.0

(1+1) E: 84% 9°

%	tr. t.	min.
34.8	24.5	1.2
51.6	25.2	3.5
58.0	25.0	2.5

Urethane ($C_3H_7O_2N$) + Phenol (C_6H_6O)

Mascarelli and Pestalozza, 1909

%	f. t.	%	f. t.
100	40.7	47.95	+1.7
91.63	31.9	38.78	13.1
83.19	22.2	28.36	27.8
76.05	10.6	15.58	38.5
66.84	-8.4	0	48
51.17	-5.9		

E : 59% -20.6°

Lecat, 1949

Urethane ($C_3H_7O_2N$) (b. t. = 185.25) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Phenol	(C_6H_6O)	182.2	46.5	190.75	6.5
o-Cresol	(C_7H_8O)	191.1	30	193.45	8
m-Cresol	(C_7H_8O)	202.2	92	202.6	-
p-Cresol	(C_7H_8O)	201.7	90	202.2	-

Urethane ($C_3H_7O_2N$) + Quinine ($C_{20}H_{24}O_2N_2$)

Adamonis, 1933

mol%	f. t.	mol%	f. t.
100	175	18.2	104.5
84.3	164.0	15.3	98.0
71.8	158.0	12.7	87.0
61.6	147.8	10.4	76.5
53.2	140.0	8.3	60.0
46.0	135.5	6.4	43.5
40.0	129.5	4.6	44.5
33.5	124.0	3.0	45.5
28.9	119.0	1.4	48.0
24.8	114.8	0	50
21.3	110.0		

E : 6.8 mol% 43.0°

Urethane ($C_3H_7O_2N$) + Resorcinol ($C_6H_6O_2$)

Mortimer, 1923

%	f. t.	%	f. t.
46.8	40	85.5	100
56.3	60	100.0	110.2
68.2	80		

Wrynakowski and Adamanis, 1934

mol%	f. t.	E	min.
0	50	-	-
4.1	45.5	-	-
8.3	42.0	-2.5	0.5
12.5	38.0	-2.0	1.0
16.8	34.0	-1.0	1.5
21.3	28.0	0.0	1.5
25.8	20.0	1.0	2.5
30.4	12.5	-2.0	3.0
35.1	+5.5	-3.0	2.7
39.9	-2.5	-2.5	3.7
44.7	+12.0	-1.5	2.7
49.7	27.0	-1.5	3.0
54.8	42.0	-2.5	2.0
60.1	54.5	-2.5	2.3
65.3	68.0	-2.0	1.7
70.8	77.0	0.0	1.3
76.4	88.0	2.0	1.0
82.1	92.5	-2.5	0.8
87.9	98.0	-2.5	0.5
93.9	103.0	-	-
100	110	-	-

Urethane ($C_3H_7O_2N$) + Guaiacol ($C_7H_8O_2$)

Pushin and Vaic, 1926

mol%	f. t.	E	min.
100	28	-	-
90	22	2	-
80	16.0	5.2	-
70	10.0	5.0	2.7
60	5.0	5.0	4.0
50	13.0	5.0	3.1
40	21.6	2.5	2.6
30	29.8	3.2	2.0
20	37.5	-	-
10	42.5	-	-
0	48.3	-	-

Urethane ($C_3H_7O_2N$) + Salol ($C_{13}H_{10}O_3$)

Bellucci, 1912

%	f. t.	E	min.
100	42	-	-
90	36.5	29	2
80	31	29	7
70	31	28.8	10
60	34	28.5	7
50	36.5	29	5
40	39	28.6	3.5
30	41.5	28.8	2
20	44	29	1.5
10	47	28.4	1
0	48.5	-	-

Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	42	25.4	39.5
88.8	36.8	21.7	41.0
78.9	34.2	18.3	41.2
62.5	31.2	15.1	42.2
55.5	30.2	12.2	43.2
49.3	33.5	9.4	44.5
43.6	35.0	7.8	45.8
38.4	36.5	4.4	47.0
33.7	37.0	2.1	48.0
29.4	38.0	0	50

E : 57.5 mol% 30°

Urethane ($C_3H_7O_2N$) + Picric acid ($C_6H_3O_7N_3$)

Pushin and Kozukar, 1947

mol%	f. t.	E	mol%	f. t.	E
100	122	-	30	82	43.5
90	116	36	25	77	43
80	110	-	20	70	"
70	104.5	39	15	60	"
60	99	41	10	44	44
50	93.5	43	5	47	-
40	89	43	0	50	-

Propionylurea ($C_4H_8O_2N_2$) + p-Nitrophenol
($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	204	202	60	158	93
10.4	200	130	70	135	"
27.3	191	93	80	106	"
31.0	188.5	"	90	105	"
40.6	181	"	100	113	111
50	170.5	"			

N,N'-Dipropionylurea ($C_7H_{12}O_3N_2$) + Resorcinol
($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	105.5	104	50	60	56
5	101.5	89.5	55	63	"
10	97	82	60	68	"
15.3	90.5	81	65.3	75	"
20.3	83	"	70.1	82	"
25.1	"	"	75	88	"
30.4	82	67	80.1	94	"
35.1	79.5	56.5	85	98	65
40.3	73.5	56	89.9	102.5	75
45	67	"	100	110	108
(2+1)					

N,N'-Dipropionylurea ($C_7H_{12}O_3N_2$) + p-Nitrophenol
($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	105.5	104	60.1	75	70
10.3	98.5	82	63	72	"
15.4	94	76	65.4	78	"
20	90.5	75	70	88	"
26.6	84	"	75.2	95	"
30	78.5	"	80	101	71.5
35	79	"	85	106	74
40	80.5	76	89.9	109	82
45	81	78	95	111.5	94
50.4	80.5	73	100	113	111
55	78.5	70			
(1+1)					

Veronal ($C_8H_{12}O_3N_2$) + o-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	191.0	-
10	184.0	-
20	176.0	-
30	161.5	-
40	134.2	-
50	118.5	-
60	97.8	25.0
70	68.7	25.0
80	32.0	25.1
90	28.2	-
100	30.0	-

Veronal ($C_8H_{12}O_3N_2$) + m-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	191.0	-
20	166.0	-
30	151.2	-
40	139.5	-
50	122.0	-
60	105.2	0
70	86.2	-
80	58.2	-11.5
90	23.0	-8.0
95	10.5	-9.0
100	4.0	-

Veronal ($C_8H_{12}O_3N_2$) + p-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	191.0	-
10	179.8	-
20	165.0	-
30	156.0	-
40	139.0	-
50	121.5	-
60	102.0	-
70	80.0	-
75	69.2	30.0
80	57.5	30.5
90	31.5	-
95	32.2	30.5
100	37.0	-

Succinimide ($C_4H_5O_2N$) + Phenol (C_6H_6O)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	41.5	-	45.3	68	-
88	29	27	41.8	75.5	-
81.3	34.5	27	53.7	58.0	-
72.5	42	-	51.4	59.0	-
64.2	51	-	35.5	83	-
60.6	53.5	-	28.8	93	59
58.6	55.5	27	17.4	108	-
54.1	58.2	-	4.9	120	-
51.4	58.5	-	0	123	-
49.8	59	-			
(1+1)					

Succinimide ($C_4H_5O_2N$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	104	-	43	82.5	-
92.3	97.8	-	41.1	81	-
86.4	93	-	35.2	"	77
76.8	83	73	34.1	82	"
68.7	75	"	24.2	96.5	"
60.1	80.8	-	14.3	107.5	-
62.0	84	-	6.9	117	-
46.7	"	77	0.0	123	-
(1+1)					

Succinimide ($C_4H_5O_2N$) + Resorcinol ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	115	-	43.9	119.5	-
91.5	108	-	43.9	120	-
81.5	99	-	38.2	116	-
70.0	112	38	34.9	112	-
66.4	116	-	29.2	105.5	95.8
64.5	117	-	26.3	102	-
60.0	119.5	-	25.2	100	-
57.1	120	-	21.1	97.5	95.8
51.5	121.5	-	13.5	111	-
51.4	122	-	5.1	119	-
47.8	121.5	-	0	123	-
(1+1)					

Succinimide ($C_4H_5O_2N$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	169	-	42.9	138	-
84.0	160	-	38.6	136	-
69.2	142	135	37.2	135	-
74.0	135	"	30.2	124	107
55.5	139	-	23.1	112	"
51.1	123	-	14.3	113	-
46.7	136	-	6.8	118.5	-
			0	123	-
(1+1)					

Succinimide ($C_4H_5O_2N$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100.0	130.0	-	37.8	120	-
91.3	120.5	-	37.0	118	-
83.8	107	-	29.3	104	95.0
78.6	114	104.5	22.9	100	-
73.1	121	"	17.6	107	-
63.0	127	-	11.5	113	-
58.0	128	-	3.4	121	-
51.5	127.5	-	0.0	123	-
44.0	126	95.0			
(1+1)					

Succinimide ($C_4H_5O_2N$) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	44.5	-	48.2	89	-
94.3	42.5	42.5	39.4	97	-
88.9	49.0	"	32.1	102.6	-
81.1	60.0	-	20.2	113	-
74.6	66.5	-	9.7	119	-
60.3	80	42.5	0	123	-
54.5	85	-			

Succinimide ($C_4H_5O_2N$) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
100	95	-	51.8	66	-
94.3	90	-	46.2	77	-
82.4	75	-	36.8	91	-
75.5	65	-	22.0	107	-
68.2	47	35	10.8	116	-
61.6	40	-	0.0	123	-
56.3	54	35			

Succinimide ($C_4H_5O_2N$) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
100	114.5	-	55.7	61.3	-
85.9	93.5	-	53.3	66	61.0
81.1	86.0	58.5	52.1	70	-
74.7	74	"	49.8	74	-
69.8	65	-	46.5	81	-
67.8	68	-	38.0	93	-
65.0	59	58.5	29.5	103	-
62.7	60	"	16.6	113	-
62.2	60	"	5.4	120.5	-
57.6	61	-	0.0	123.0	-

(1+1)

Succinimide ($C_4H_5O_2N$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
100	111	-	44.3	102.5	-
89.8	103.5	-	34.4	108	-
77.6	92.5	-	28.7	110.5	85
68.9	85.0	85	17.8	116	-
61.6	91.0	"	8.0	120	-
53.6	97.0	"	0.0	123	-

Succinimide ($C_4H_5O_2N$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
0	123	-	59.5	87	79
11.6	120	-	67.3	83	"
22.8	115	-	78.3	99	-
32.6	110	79	89.0	108	-
41.4	104	"	100.0	121	-
51.7	97	-			

Succinimide ($C_4H_5O_2N$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
100	95	-	42.7	90	57
91.9	86.5	-	44.0	98	"
81.4	74	-	24.0	108	-
72.0	60	57	14.1	115	-
61.2	68	-	5.5	120	-
48.4	83	57	0.0	123	-

Sorum and Durand, 1952

%	f.t.
0	123.0
-	54.0 E
100	95.5

Succinimide ($C_4H_5O_2N$) + β -Naphthol

Kremann and Dietrich, 1923

%	f.t.	E	%	f.t.	E
100	121	-	45.3	85.5	85.5
95.5	116	-	41.3	93.2	"
84.2	103	-	40.0	93.3	-
71.6	82.0	72.5	38.4	95	-
69.0	79.1	"	37.5	95.1	72.5
66.4	76.5	"	35.9	99.1	-
59.9	82.1	"	24.8	107	-
58.1	83	-	17.0	113	-
55.8	87.0	-	9.8	118.5	-
53.7	87.5	-	4.8	121	-
52.0	87.5	-	0.0	123	-
47.0	86	-			

(1+1)

Succinimide ($C_4H_5O_2N$) + 1,4-Dioxynaphthalene
($C_{10}H_6O_2$)

Kremann and Dietrich, 1923

%	f.t.	%	f.t.
100	183	42.4	133.5
77.7	162	40.0	133.5
66.8	142.5	37.3	133.2
61.1	134	30.5	130
52.7	124.0	21.7	122.5
50.4	130	14.5	115
47.5	131.5	4.9	121
43.7	133	0.0	123

E: 114°

(2+1)

Succinimide ($C_4H_5O_2N$) + 1,6-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann and Dietrich, 1923

%	f. t.	%	f. t.
100	134	38.4	118.5
88	117	32.7	113
77	113.5	28.1	106
68.5	123	21.8	93
63.6	125.5	16.3	93
56.2	126.5	8.1	108
48.7	124.5	0	123
43.1	121.5		

 E_1 : 107° E_2 : 87.5° (1+1)Succinimide ($C_4H_5O_2N$) + 2,3-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
100	162	-	48.1	143	-
90.0	154	-	41.6	138.5	-
77.8	143	140	33.8	130	-
73.3	142	"	24.3	120	108.5
65.2	147	-	16.8	113.5	-
64.8	147	140	13.3	108.5	108.5
60.8	149	-	10.2	117	-
58.5	149.5	-	5.8	120	-
54.4	148.6	-	0.0	123	-
53.4	148	-			

(1+1)

Succinimide ($C_4H_5O_2N$) + 2,6-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann and Dietrich, 1923

%	f. t.	E	%	f. t.	E
0	123.0	-	36.8	139	140.0
8.6	121	-	39.1	140	-
22.5	130	116.5	42.8	147	140.0
27.7	135	-	47.6	151.0	-
29.7	138	-	48.6	153	140.0
32.4	138.5	-	55.6	163	"

(2+1)

Ethylsuccinimide ($C_6H_9O_2N$) + Phenol (C_6H_6O)

Paterno, 1896

%	f. t.	%	f. t.
98.71	-0.74	82.61	18.92
95.68	2.72	78.08	27.95
91.23	6.82	100.00	35.41
88.69	10.26		
84.56	15.32		

Benzamide (C_7H_7ON) + Phenol (C_6H_6O)

Kremann and Wenzing, 1917

%	f. t.	%	f. t.
0.0	124.0	63.2	23.5
6.2	119.0	65.9	22.5
22.5	102.0	66.2	22.0
30.6	91.5	69.6	19.5
37.7	78.5	71.8	17.5
44.8	64	74.0	15.0
44.9	64.5	80.3	22.5
50.4	53.3	86.2	29.8
54.2	45	92.0	35.1
57.2	40.5	96.0	38.2
58.7	36.5	100.0	40.8

(1+2)

Benzamide (C_7H_7ON) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	102.8	-	41.1	66.0	37.6
94.3	99.4	-	40.4	58.0	-
85.4	93.2	-	39.2	71.0	-
80.4	87.5	-	35.4	78.0	37.8
72.4	77.0	-	30.4	88.5	-
65.9	67.0	-	26.3	96.0	-
59.9	55.2	-	18.6	107.6	-
54.4	45.4	38	14.5	112.2	-
50.7	38.0	-	9.4	117.5	-
47.2	47.0	-	3.0	122.8	-
45.7	50.1	-	0.0	124.8	-
43.6	58.0	-			

Benzamide (C_7H_7ON) + Resorcinol ($C_6H_6O_2$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	108.5	-	42.6	87.0	-
91.2	103.0	-	40.1	85.8	-
83.4	96.2	-	38.9	84.8	-
76.2	87.5	76.1	36.2	82.5	-
69.3	78.2	76.2	34.1	80.5	-
63.8	78.5	-	28.3	88.0	80.2
55.9	85.5	-	23.7	95.5	-
51.9	87.2	-	10.7	113.5	-
45.0	88.0	-	4.8	121.0	-
			0.0	124.8	-

(1+1)

Benzamide (C_7H_7ON) + Hydroquinone ($C_6H_6O_2$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	169.0	-	41.2	101.0	-
86.7	161.0	-	37.7	102.0	-
75.2	152.0	-	35.6	103.0	-
69.5	145.0	-	35.0	103.2	-
64.9	139.0	-	32.4	103.8	-
61.3	134.2	-	29.1	103.5	-
57.7	128.0	-	22.3	101.8	-
54.4	122.2	-	17.9	107.0	101.1
51.5	108.5	100.0	12.3	113.0	-
46.4	103.5	"	8.1	118.0	-
44.1	100.3	"	0.0	124.8	-

(2+1)

Benzamide (C_7H_7ON) + Pyrogallol ($C_6H_6O_3$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0	124.8	-	44.2	80	-
3.2	122.9	-	46.7	81.5	75.5
7.5	119.1	-	50.5	82.7	-
14.3	112	-	55.82	82.3	78
18.4	106	-	59.51	81.0	-
26.4	93.3	-	70.24	99.0	78
27.7	92	-	74.12	104.9	-
29.4	89	-	84.58	116	-
33.3	82.5	76	90.68	121	-
36.4	76	"	95.35	124	-
37.6	"	-	100	126.1	-
39.5	-	76			

(1+1)

Benzamide (C_7H_7ON) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	44.8	-	54.3	93.2	41.6
96.9	43.2	41.8	45.2	99.1	-
87.5	57.0	-	35.9	104.7	-
78.1	73.0	41.6	29.4	107.9	-
63.6	86.3	-	15.4	116.0	-
60.9	88.4	-	0	124.8	-
56.6	91.5	-			

Benzamide (C_7H_7ON) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	95.0	-	42.6	76.0	-
87.4	84.0	-	37.0	88.0	-
77.5	74.5	-	36.8	88.1	-
68.0	55.5	38.7	28.5	100.4	-
60.4	38.7	"	21.1	108.5	-
55.2	44.0	"	12.6	116.0	-
50.3	56.0	"	5.8	121.0	-
44.0	73.0	"	0.0	124.8	-

(1+1)

Pushin and Rikovski, 1930

%	f. t.	E	%	f. t.	E
0.0	128	-	58.4	43	41
11.3	121	-	59.3	41	"
22.3	112.5	35	61.4	46	"
33.0	102	31	63.3	50.5	"
43.4	84	40	65.2	53	"
53.5	58	41	68.1	59	"
54.5	55	"	72.8	68.5	39
56.4	49	"	82.2	81	33
57.4	47	"	91.1	89.5	-
			100.0	96	-

Skau, 1935

%	f. t.	E	%	f. t.	E
0	127.2	-	56.3	42.3	-
9.4	120.5	-	56.5	42.1	-
69.3	101.1	-	56.7	-	42.1
41.9	80.1	-	59.4	48.9	-
43.7	74.5	-	60.0	50.3	-
46.1	66.7	-	64.5	58.4	-
49.0	63.7	-	66	60.4	-
53.3	51.7	-	81.6	81.2	-
55.3	44.8	-	100.0	96.8	-
55.8	-	42.2			

Benzamide (C₇H₇ON) + p-Nitrophenol (C₆H₅O₃N)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	112.0	-	52.7	97.0	-
93.7	106.4	-	51.7	97.0	-
85.1	96.0	-	46.9	96.0	-
79.0	88.0	81.4	40.0	93.0	90.1
71.4	84.4	81.5	33.3	94.0	90.3
70.2	87.3	81.6	25.7	104.0	-
66.5	91.0	-	12.5	116.5	-
61.1	95.0	-	0.0	124.8	-
55.0	97.0	-			

(1+1)

Benzamide (C₇H₇ON) + α-Naphthol (C₁₀H₈O)

Kremann and Auer, 1918

%	f. t.	E	%	f. t.	E
100	92.0	-	47.0	76.0	38.1
89.3	85.0	-	45.8	78.9	38.3
82.3	76.8	-	40.0	88.5	-
73.9	66.0	38.0	32.1	100.0	-
65.6	50.0	38.1	24.1	108.4	-
56.7	45.0	38.2	15.2	115.0	-
50.4	67.0	38.0	0.0	124.8	-

Sorum and Durand, 1952

%	f. t.
0	124.8
-	39.0 E
100	92.0

Benzamide (C₇H₇ON) + β-Naphthol (C₁₀H₈O)

Kremann and Auer, 1918.

%	f. t.	E	%	f. t.	E
100	122.0	-	53.4	68.0	54.0
91.3	112.0	-	44.4	83.3	54.1
84.5	103.0	-	36.4	95.0	-
82.0	99.5	54.3	29.4	103.0	-
75.5	89.0	54.2	19.4	112.0	-
67.0	72.1	54.0	9.8	118.0	-
60.5	55.3	54.2	0.0	124.8	-
68.5	57.5	54.0			

Sorum and Durand, 1952

%	f. t.
0	124.8
-	56.9 E
100	122.0

Benzamide (C₇H₇ON) + 1,4-Dioxynaphthalene
(C₁₀H₈O₂)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	183	-	37.4	100	92-91
87.3	173	-	31.9	111	-
20.5	160	-	24.8	116	-
62.5	148	-	17.6	121.5	-
52.5	129	-	8.7	125	-
46.5	115	-	0.0	128	-
42.2	104	92-91			

Benzamide (C₇H₇ON) + 1,5-Dioxynaphthalene
(C₁₀H₈O₂)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	253	-	37.8	193	-
81.4	239	-	30.9	162	106
72.4	233	-	26.4	111	"
63.9	223	-	19.8	119	-
53.8	211	-	12.8	125	-
49.6	202	106	0.5	127	-
47.8	193	-	0.0	128	-

Benzamide (C₇H₇ON) + 1,6-Dioxynaphthalene
(C₁₀H₈O₂)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	135	-	51.0	96	-
92.8	123	-	40.3	105	-
76.6	112	-	36.2	108	-
70.4	+	90	27.5	114	-
61.3	+	91	19.7	119	-
61.2	98	-	13.2	123	90
53.4	93	-	4.8	126	-
49.7	96	-	0.0	128	-

Benzamide (C_7H_7ON) + 1,8-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	137	-	48.6	83	-
89	127	-	45.4	88.5	-
79.3	118.5	-	38.1	99	46
69.3	106	-	30.3	110	"
58.8	88.5	46	21.9	118	-
54.9	64	"	11.9	124.5	-
50	72	-	0.0	128	-

Benzamide (C_7H_7ON) + 2,3-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	162	-	38.3	105	-
89.4	155	-	33.4	110	-
77.5	142	-	29.3	113	-
68.0	121	-	26.5	109	106
59.8	97	80	21.9	110	"
56.8	91	-	19.0	113	"
52.7	82	79	8.1	123	80
49.3	86	80	0.0	128	-
42.6	99	-			
(1+3)					

Benzamide (C_7H_7ON) + 2,6-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	216	-	49.1	105	87.5
87.4	204	-	39.1	93.5	87
71.8	170	-	31.1	110	-
62.9	141	85	19.6	119	84.5
52.2	90	87	9.3	124	-
			0.0	128	-

Benzamide (C_7H_7ON) + 2,7-Dioxynaphthalene
($C_{10}H_8O_2$)

Kremann, Hemmelmayer and Riemer, 1922

%	f. t.	E	%	f. t.	E
100	186	-	51.0	97	-
85.1	172.5	-	50.9	100	77
73.0	160	-	41.3	88	"
65.1	145	-	24.4	108	78
57.4	119	77	17.6	118	-
56.7	118	"	0	128	-

Phenylacetamide (C_8H_9ON) + Phenol (C_6H_6O)

Perkin, 1896

mol%	t	d	t	(α) magn. (water=1)
60	67.17	1.05294	78.5	2.3397
	77.4	.04460	-	-
100	65	.0368	39.0	2.4646
	75	.0530	88.8	2.4030

Acetanilide (C_8H_9ON) + Phenol (C_6H_6O)

Mortimer, 1923

%	f. t.
57.3	40
49.1	60
39.5	80
20.5	100
0.0	113.0

Mortimer, 1928

%	f. t.	%	f. t.
100	40.5	45	69.5
95	37.5	40	78.2
90	33.0	30	91.0
80	19.5	20	100.0
69	-6.0 E	10	107.5
60	+31.0	5	111.0
55	47.0	0	113.5
50	59.0		

Shishokin and Mouskina, 1938

mol%	f. t.	mol%	f. t.
0	114	41.05	76
21.39	102	50.23	59
29.12	90.5	58.19	41

Angeletti, 1928

E : 61.4% -14°

Perkin, 1896

mol%	t	d	t	(α) magn. (water=1)
60	67	1.05300	71.4	2.3615
	77	1.0450		

Acetanilide (C_8H_9ON) + Resorcinol ($C_6H_6O_2$)

Angeletti, 1928

E : 46.1% 24°

Hrynakowski, 1934

E : 50% 35° (sic)

Acetanilide (C_8H_9ON) + Hydroquinone ($C_6H_6O_2$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	169	55.1	122.0
95.9	166	50.1	109.0
91.7	163	45.0	94.0
87.4	159.5	39.8	77.5 E
83.1	156.5	34.5	83.0
78.1	153.0	29.0	89.0
74.1	148.5	23.4	92.0
69.5	141.5	17.8	95.5
64.8	135.5	12.0	98.5
60.0	129.5	6.0	101.0
		0.0	112.0

Acetanilide (C_8H_9ON) + Salol ($C_{13}H_{10}O_3$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	42.0	38.7	94.0
93.8	40.0 E	34.0	96.0
85.0	62.0	29.6	98.0
78.1	70.0	25.3	100.0
71.6	76.0	21.3	102.0
65.4	79.5	17.4	104.0
59.5	83.8	13.6	106.5
53.9	86.5	10.0	108.5
48.6	89.0	6.5	110.0
43.5	92.0	3.2	112.0
		0.0	112.0

Acetanilide (C_8H_9ON) + Thymol ($C_{10}H_{14}O$)

Angeletti, 1928

E: 66.7% 24.5°

Quereigh and Cabagnari, 1912

E: 67.3% 18.5°

Acetanilide (C_8H_9ON) + Vanilline ($C_8H_8O_3$)

Lehmann, 1914

%	f. t.	%	f. t.
100	81.8	90	77.9
99	80.8	85	76.0
98	80.6	80	75.7
97	80.0	75	73.5
96	79.9	70	73.0
95	79.5	67	70.3
94	"	60	80.0
93	79.0	55	85.0
92	78.8	50	91.3
91	"	0	116

Acetanilide (C_8H_9ON) + Salipyrine ($C_{18}H_{18}O_4N_2$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	92.0	28.6	85.0
88.3	85.0	24.6	88.5
78.2	82.0	21.0	92.0
68.6	79.0	17.7	95.0
61.5	76.0	14.6	98.0
54.5	72.0	11.7	101.0
48.2	68.0	9.1	105.0
42.6	64.0 E	4.3	110.0
37.5	74.0	2.1	112.0
32.8	80.0	0.0	112.0

Acetanilide (C_8H_9ON) + o-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	%	f. t.
0	112.0	60	31.8
20	96.2	72	11.5
30	82.8	80	19.5
40	70.0	90	24.2
50	51.0	100	30.0

Acetanilide (C_8H_9ON) + m-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	%	f. t.
0	112.0	50	53.2
20	99.2	60	28.2
30	87.5	80	-3.0
40	72.5	90	3.2
		100	4.0

Acetanilide (C_8H_9ON) + p-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	%	f. t.
0	112.0	60	27.0
20	97.5	80	30.2
30	86.0	90	30.4
40	71.0	100	37.0
50	50.4		

Acetanilide (C_8H_9ON) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Crompton and Whiteley, 1895

mol%	f. t.	mol%	f. t.
100	112.5	50.00	79.5
82.32	104.3	35.00	88.3
73.08	99.5	22.51	97.0
63.56	94.4	15.00	103.4
58.71	89.1	0.00	113.5
53.77	86.0		

Acetanilide (C_8H_9ON) + Quinine ($C_{20}H_{24}ON_2$)

Hrynakowski and Adamanis, 1933

mol%	f. t.	mol%	f. t.
100.0	175.0	29.3	121.0
88.7	165.0	25.3	118.0
78.9	160.0	21.7	114.0
70.7	156.0	18.3	108.0
62.4	149.0	15.1 E	105.0
55.5	145.0	12.2	106.0
49.2	138.0	9.4	108.0
43.2	135.0	6.8	109.0
38.4	128.0	4.4	111.0
33.7	125.0	2.1	112.0
		0.0	112.0

Methylacetanilide ($C_9H_{11}ON$) + Salol ($C_{13}H_{10}O_3$)

Angeletti, 1928

E : 79% 29°

Dimethyl diphenylurea ($C_{15}H_{16}ON_2$) + Pyrocatechol
($C_6H_6O_2$)

Medard, 1931

%	f. t.	%	f. t.
0	118	44.5	81
9	112	54	76
16	102	61	84
23.5	88	75	94
28	82	100	104
36.5	82.5		

Dimethyl diphenylurea sym. ($C_{15}H_{16}ON_2$) +
Pyrogallol ($C_6H_6O_3$)

Medard, 1931

%	f. t.	%	f. t.
0	118	50	114
7	115	58	108
20	107	60	105
27	116.5	65	107
36	118.5	100	133
45	118		

Diethyl diphenylurea sym. ($C_{17}H_{20}ON_2$) + Phenol
(C_6H_6O)

%	f. t.	%	f. t.
0	72.3	35	36
10	63	40	30
14.5	51	41	27.5
20	39	70	24
22.5	41	80	32.5
26	41.8	90	38
30	41	100	40

Diethyl diphenylurea ($C_{17}H_{20}ON_2$) + Pyrocatechol
($C_6H_6O_2$)

Médard, 1931

%	f. t.	%	f. t.
0	72.3	35	63
10	62.5	40	58
15	53.75	45	67
20	58.75	50	75
22.5	62.5	66.5	91
30	64.3	80	98
33.5	64	100	103.5
(1+1)			

Diethyl diphenylurea ($C_{17}H_{20}ON_2$) + Resorcinol
($C_6H_6O_2$)

Médard, 1931

%	f. t.	%	f. t.
0	72.3	33	45.5
10	60.5	40	70
17	50.0	50	85
20	39	66	97
23.5	43	100	110
30	46.5		
(1+1)			

Diethyl diphenylurea ($C_{17}H_{20}ON_2$) + Pyrogallol
($C_6H_6O_3$)

Médard, 1931

%	f. t.	%	f. t.
0	72.3	32	50.5
10	62.25	34.5	55
16	52.4	35	56
20	45	37	67
22	45	45	74
26	48	52	98
28	47	60	104
30	51		
(1+1)			

Diethyldiphenylurea ($C_{17}H_{20}ON_2$) + p-Cresol (C_7H_8O)

Médard, 1931

%	f. t.	%	f. t.
0	72.3	45	14
11	60.5	63	12
20	46.5	73	18
27	31	80	23
29	26.5	89	27
35	22	100	30
40	18.5		

Diethyldiphenylurea ($C_{17}H_{20}ON_2$) + Picric acid
($C_6H_3O_7N_3$)

Giua and Guastalla, 1933

%	f. t.	E	%	f. t.	E
0	73.0	-	52.22	92.8	51.8
9.33	65.0	-	59.81	101.2	-
18.33	56.8	-	65.17	105.0	-
30.13	62.0	52.0	74.03	111.4	-
35.85	70.8	51.8	82.17	116.0	-
42.93	81.1	51.5	100	121.0	-

Diethyldiphenylurea ($C_{17}H_{20}ON_2$) + β -Naphthol
($C_{10}H_8O$)

Médard, 1931

%	f. t.	%	f. t.
0	72.3	34.9	49.50
13.5	64.5	37.5	47
18	57.5	40	52
22.5	50	50	75.5
27.5	47	100	122
(1+1)			

Diethyldiphenylurea ($C_{17}H_{20}ON_2$) + β -Dinaphthol
($C_{20}H_{14}O_2$)

%	f. t.	%	f. t.
0	72.3	52	168
10	68	57.5	168
25	61	60	176
36	125	70	195
44	152	100	215

p-Dimethylaminobenzal-p-methoxyacetophenone
($C_{18}H_{19}O_2N$) + α -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	126-127	58.3	57
16.7	107	67.9	67-68
25.5	91-92	70.3	71
31.4	77	81.8	81-82
32.7	78-79	91.8	89
38.6	78	100	94
47.0	67		
(1+1)			

p-Dimethylaminobenzal-p-methoxyacetophenone
($C_{18}H_{19}O_2N$) + β -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	126-127	61.5	86-87
13.7	109	75.0	104
25.4	82-83	88.2	114
36.2	57	94.9	118
44.3	58	100	122
54.7	75		

p-Dimethylaminobenzophenone ($C_{15}H_{15}ON$) +
 β -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	90	51.7	67
8.9	80-81	50.5	82
16.4	72	73.4	101
28.2	51	90.4	116
43.2	41	100.0	122
44.4	45		

pp-Tetramethyldiaminobenzophenone ($C_{17}H_{20}ON_2$) +
Resorcinol ($C_6H_4O_2$)

Pfeiffer, 1924

%	f. t.	%	f. t.
100	110	26.9	130
91.1	108	25.7	129
83.7	105	23.9	128
72.0	100	22.7	130
66.7	99-100	21.8	133
59.2	108	20.3	140
51.6	116	16.8	158
41.7	124	4.7	170
44.0	130	0.0	172
30.6	131		(1+1)

pp'-Tetramethyldiaminobenzophenone ($C_{17}H_{20}ON_2$) +
 α -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	172	45.3	83
16.1	154	54.8	67
27.8	127	55.6	65
35.0	111	66.0	67
37.8	98	81.9	87
40.3	89	90.7	90
43.1	86	100	94
(1+1)			

pp'-Tetramethyldiaminobenzophenone ($C_{17}H_{20}ON_2$) +
 β -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	172	43.8	104
10.7	161	50.0	98
18.2	153	56.4	89
23.4	145	65.4	97
29.7	128	75.6	108
32.7	119	85.7	116
33.8	119	92.7	120
39.6	110	100	122
			(1+1)

p-Dimethylaminobenzalacetophenone ($C_{17}H_{17}ON$) +
 β -Naphthol ($C_{10}H_8O$)

Pfeiffer, 1924

%	f. t.	%	f. t.
0	114-115	61.0	88
12.8	93	73.5	102
25.6	79	90.3	114
39.6	56	100	122
49.0	62-63		

p-anisidine (C_7H_9ON) + Phenol (C_6H_6O)

Hrynakowski, Staszewski and Szule, 1937

%	f. t.	E
100	42.3	-
90	30.9	18.0
85	25.7	21.1
80	24.8	21.2
75	32.0	21.2
70	43.1	21.2
60	53.8	21.0
50	57.2	-
43	58.4	-
40	58.0	35.8
35	56.7	41.9
25	50.8	43.6
20	45.2	43.2
15	45.5	43.3
10	51.0	43.8
0	57.8	-
(1+1)		

p-anisidine (C_7H_9ON) + Resorcinol ($C_6H_6O_2$)

Hrynakowski and Jeske, 1938

%	ε	%	ε
0	13	68	10.8
15	16	75	12.2
31	12.5	83	14.2
44	9.8	100	7.0
58	9.6		

p-anisidine (C_7H_9ON) + o-Cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	57.8	-
20	44.5	38.5
25	40.5	-
30	39.0	35.8
35	39.6	31.6
40	36.0	32.0
50	32.2	-
60	35.0	-
70	32.5	-
80	28.5	20.0
100	30.0	-
(2+1)		(1+2)

p-anisidine (C_7H_9ON) + m-cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	57.8	-
20	45.5	-
30	35.2	13.2
40	24.2	12.2
50	13.2	-
60	10.0	- 1.8
70	3.0	-
90	2.5	- 1.2
100	4.0	-
(1+1)		

p-anisidine (C_7H_9ON) + p-cresol (C_7H_8O)

Hrynakowski and Adamanis, 1938

%	f. t.	E
0	57.8	-
10	50.5	43.5
20	45.0	"
30	51.0	"
40	55.8	43.0
50	55.8	-
60	52.8	-
70	45.0	20.0
80	31.8	20.5
90	27.8	20.0
100	37.0	-
(1+1)		

p-anisidine (C_7H_9ON) + o-aminophenol (C_6H_7ON)

Hrynakowski, Staszewski and Szule, 1937

%	f. t.	E
100	174.0	-
90	173.3	-
80	167.8	-
70	163.0	45.6
60	152.3	48.1
50	146.0	47.9
40	132.1	50.7
30	121.8	51.3
20	96.2	52.2
10	61.6	51.0
5	54.1	-
0	57.8	-

p-anisidine (C_7H_9ON) + m-aminophenol (C_6H_7ON)

Hrynakowski, Steszewski and Szule, 1937

%	f. t.	E
100	123.4	-
90	115.8	-
80	110.1	-
70	102.0	-
60	92.1	-
50	78.7	50.6
45	67.6	50.0
40	60.9	51.8
35	54.3	51.2
30	51.4	42.6
25	51.3	45.5
15	48.2	45.4
10	52.3	44.8
0	57.8	-
(1+1)		

p-anisidine (C_7H_9ON) + p-aminophenol (C_6H_7ON)

Hrynakowski, Steszewski and Szule, 1937

%	f. t.	E
100	187.2	-
85	178.6	-
50	157.5	-
45	153.1	-
30	135.8	54.2
15	107.2	55.0
10	88.3	55.4
5	55.4	-
2	56.8	54.3
0	57.8	-

p-anisidine (C_7H_9ON) + α -naphthol ($C_{10}H_8O$)

Hrynakowski, Steszewski and Szule, 1937

%	f. t.	E
100	94.6	-
90	86.8	-
80	77.9	51.3
75	69.7	51.8
70	55.1	52.9
65	55.0	52.7
60	56.9	52.1
55	58.5	-
50	57.8	-
45	56.2	-
40	53.7	-
35	49.9	-
30	45.0	40.2
25	41.1	-
20	46.3	40.0
10	52.8	37.1
0	57.8	-
(1+1)		

p-anisidine (C_7H_9ON) + β -naphthol ($C_{10}H_8O$)

Hrynakowski, Steszewski and Szule, 1937

%	f. t.	E
100	122.7	-
90	112.5	83.6
85	104.8	85.1
80	102.5	85.2
75	95.0	85.2
70	88.5	-
65	89.1	85.3
60	93.1	84.8
54	94.0	-
50	92.8	-
40	90.0	-
30	84.1	51.2
25	77.3	52.1
20	72.9	53.4
15	64.7	52.0
10	53.9	52.8
5	56.2	53.0
0	57.8	-
(1+1)		

Lecat, 1949

o-Phenetidine ($C_8H_{11}ON$) (b.t.=232.5) + Phenols.

2 nd component		Az			
Name	Formula	b. t.	%	b. t.	Dt. mix.
as.					
o-Xylenol ($C_8H_{10}O$)					
		226.8	8	232.05	
Thymol ($C_{10}H_{14}O$)					
		232.9	54.5	234.3	
Carvacrol ($C_{10}H_{14}O$)					
		237.85	87.0	238.0	
Pyrocatechol ($C_6H_6O_2$)					
		245.9	92	246.0	
Ethyl salicylate					
		233.8	18	232.2	-0.8 (21%)

p-Phenetidine ($C_8H_{11}ON$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.	Sat. t.
0	249.9	-
34	253.8	38.5 Az
100	245.9	-

Phenacetine ($C_{10}H_{13}O_2N$) + Resorcinol ($C_6H_6O_2$)

Hrynakowski and Adamanis, 1935

mol%	f. t.	E	min.
100.0	110	-	-
96.9	108.0	-	-
93.6	107.0	-	-
90.3	104.0	-	-
86.8	101.0	-	-
83.1	96.0	-	-
79.3	92.0	69.0	0.3
75.2	86.0	"	0.4
71.1	78.0	"	0.6
66.7	69.0	"	0.9
62.1	76.0	-	-
60.0	76.5	-	-
57.3	76.0	-	-
52.7	74.0	74.0	-
52.2	75.0	"	0.8
46.9	84.0	"	0.6
41.2	92.0	"	0.2
35.3	101.0	"	0.3
29.0	109.0	-	-
22.4	115.0	-	-
15.4	121.0	-	-
7.7	126.0	-	-
0	135	-	-
(2+3)			

Hrynakowski, 1934

 E_1 : 41.0 % 74° E_2 : 55.0 % 69°Phenacetine ($C_{10}H_{13}O_2N$) + Thymol ($C_{10}H_{14}O$)

Quercigh and Cavagnari, 1912

 E : 71.5 % 30°Phenacetine ($C_{10}H_{13}O_2N$) + Salol ($C_{13}H_{10}O_3$)

Quercigh and Cavagnari, 1912

 E : 96 % 37.5°

Adamanis, 1933

mol%	f. t.	mol%	f. t.
0	135	50.6	108.0
4.2	130.5	55.7	105.0
8.5	127.5	60.9	101.8
12.9	126.0	66.2	98.0
17.3	123.5	71.6	94.5
21.9	121.8	77.1	90.0
26.5	119.2	82.6	84.5
31.1	117.5	88.3	77.5
35.9	114.8	94.1	67.5
40.7	112.5	100	42
45.6	110.5		

 E : 97.6mol% 40.0°p-Azoxyanisole ($C_{14}H_{14}O_3N_2$) + Hydroquinone
($C_6H_6O_2$)

de Kock, 1904

mol%	clearing point	f. t.	E
0	135.0	114	-
2.25	129.4-130.3	113.2	-
4.5	123.3-124.6	112.75	105
6.4	117.6-119.4	112.2	104
7.8	114.7-116.6	111.6	105
8.75	111.4-113.9	111.4	-
12	105.8	110.0	-
15	99.6	109.2	-
25.6	-	106.2	-
40	-	128.1	106.05
50.3	-	140.2	105.8
59.8	-	145.8	-
74.8	-	153.6	-
100	-	169	-

Azophenyl bis (ethylcarbonate)($C_{18}H_{18}O_6N_2$) +
Anisolzophenol ($C_{15}H_{12}O_2N_2$)

Walter, 1889

mol%	f. t.	clearing point
100	142	56
58.3	-	81
48.2	-	92
0	97	121.5

Azophenyl bis (ethylcarbonate) + Phenetolazophenol
($C_{18}H_{18}O_6N_2$) ($C_{14}H_{14}O_2N_2$)

Walter, 1889

mol%	f. t.	clearing point
0	97	121.5
46.0	-	99
47.0	-	98
65.8	-	84.5
100	126	70

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Pyrocatechol
Pfeiffer and Wang, 1927 ($C_6H_6O_2$)

%	f. t.	m. t.
0	146.5	144
14	131	111.2
16	128	111.2
24	118	111.5
35	128	114
37	129	115
40	130	122 (1+1)
53	126.5	118.9
55	125	118.9
57	123	119
61	123.3	119.2
64	122.9	110 (1+2)
66	122.5	100
70	119.5	89
80	105.5	88.5
90	96	88.6
100	105	104

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Resacetophenone ($C_8H_8O_3$)
Pfeiffer and Wang, 1927

%	f. t.	%	f. t.
0	146.5	58	118
20	130	65	123.6
35	111	68.2	124.9 (1+2)
43	114	72	123.8
48	117.6	80	122.8
51.7	118 (1+1)	88	130.5
56	117.2	100	143

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + p-Oxybenzophenone ($C_{13}H_{10}O_2$)

Pfeiffer and Wang, 1927

%	f. t.	%	f. t.
0	146.5	65	87
30	128.2	70	89
40	113	74	93.8
50	96.8	85	110
55	88	100	132.5
58.2	91.6 (1+1)		

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + 2,5-Dioxybenzophenone ($C_{13}H_{10}O_3$)

Pfeiffer and Wang, 1927

%	f. t.	%	f. t.
0	146.5	65	96
21	133	70	98.5
35	119	75	100.3 (1+2)
45	106	80	99
52	92	86	101.5
55	83	90	111
60	93	100	122

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + o,o'-Dioxybenzophenone ($C_{13}H_{10}O_3$)

Pfeiffer and Wang, 1927

%	f. t.	E .
0	146.5	144
15	137.5	77.8
43	114	77.4
60	86.3	77.8
70	87.3	77.8
75	88.9	76 (1+2)
82	83.6	53
90	76	53
96	60.2	53
100	59.5	59

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + 2-Oxy-5-methoxybenzophenone ($C_{14}H_{12}O_3$)

Pfeiffer and Wang, 1927

%	f. t.	E .	%	f. t.	E
0	146.5	144	70	105	73.8
15	141	73.8	79	89.5	73.4
24	137.2	74.5	84.7	76.5	74.2
36	131	"	91	79	74.5
44.4	125.5	"	100	84	83
52	121	"			

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Methyl-p-oxybenzoate ($C_8H_8O_3$)

Pfeiffer and Seydel, 1928

%	E	f. t.	%	E .	f. t.
0	145	147	70	93	99
20	83	132	75	"	97
40	"	108	80	"	101
50	"	87	85	"	109
55	"	91	90	"	117
60	"	96.5	100	124	127
			(1+1)		

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + o-Aminophenol (C_6H_7ON)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	146	145	45	101	98
10	137	93	50	100	"
20	124	"	55	114	"
30	108	"	60	127	"
35	95	"	70	148	"
40	99	"	80	160	"
			100	174	174
(1+1)					

SARCOSIN ANHYDRIDE + NEO-ORTHOFORM

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Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Neo-orthoform
($C_8H_9O_3N$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	146	145	60	144	118
10	142	121	70	139	"
20	133	"	80	123	"
30	128	"	85	127	"
40	139	"	90	135	"
50	144	"	100	142	139
54	145	135			

(1+1)

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Benzene-azo-p-cresol
($C_{13}H_{12}ON_2$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	61	115	94.5
12	142	96.2	70	106	"
24	136.5	95.2	76	98	"
32	134.8	95.6	83	99	95
44	130.0	95	90	103.5	95
52	123.5	95	100	108	106

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Benzene-azo- β -naphthol
($C_{16}H_{12}ON_2$)

Pfeiffer and Wang, 1927

%	f. t.	%	f. t.
0	146.5	74	109.8
20	140	77.5	114.5
34	132	82	118
46.6	127.2	90	123
65.2	116	100	129

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Quinizarin
($C_{14}H_8O_4$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	50	160.8	134.2
8	143	134.4	62.8	170.5	134.5
15	139	134	77.2	180.5	134.6
27.4	143	134.2	90	188	134.6
40	154.8	"	100	197	195

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + α -Naphthol
($C_{10}H_8O$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	64	114.8	111.3
20	133	112	67	115.3	111.3
30	117	112	70	114.6	79
42	122.6	112.5	75	103.9	69
45	125.2	112	80	92.8	"
50.3	125.9	113	85	77.3	"
55	124.8	110	90	84.6	"
59	122	111	100	96	95

(1+1) (1+2)

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + β -Naphthol
($C_{10}H_8O$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	62.5	125.5	122.2
19.9	129	115.5	67	126.2	122.2
26.7	119.4	115	70.9	125.3	94.5
30.9	121.2	114.8	80	114.2	95
42.3	130.6	115	95	116	97.3
50	133	130	100	122.5	120
55.3	130.3	121			

(1+1) 134° (1+2) 127°

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + 1-Oxyanthraquinone
($C_{14}H_8O_3$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	45	144.5	131
8	142.8	131	55	153	"
16	139	"	66.6	161.3	"
25	135	"	84	177	130.5
33.4	134.5	"	100	192.5	190

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + 1-Oxy-2-Methoxyanthraquinone
($C_{15}H_{10}O_4$)

Pfeiffer and Wang, 1927

%	f. t.	E	%	f. t.	E
0	146.5	144	47.2	184.2	138.5
8	144	138	64.1	199	139
12.4	142	138	78.2	210	139
24	160	139	100	206	224
36	174	138.5			

p-Dimethylaminobenzaldehyde ($C_9H_{11}ON$) + Phenol
(C_6H_6O)

Osipenko and Titchenko, 1941

mol%	f.t.	mol%	f.t.
0	73	61.22	25.5
14.93	60.5	70.35	2.5
28.4	45	78.76	7
34.6	36.5	86.4	18
40.5	30.5	94.26	31.5
46	33	100	41
50	35.8(1+1)		

p-Dimethylaminobenzaldehyde ($C_9H_{11}ON$) +
Pyrocatechol ($C_6H_6O_2$)

Osipenko and Titchenko, 1941

mol%	f.t.	mol%	f.t.
0	73	57.4	46.5
13	65	67	42.5
25	58	76	64
33.3	61.8(2+1)	84.5	87
36.5	60.5	92.5	97
47.5	52	100	105

p-Dimethylaminobenzaldehyde ($C_9H_{11}ON$) +
Resorcinol ($C_6H_6O_2$)

Osipenko and Titchenko, 1941

mol%	f.t.	mol%	f.t.
0	73	57.5	67
13	61.5	67	60
25	44.5	76	72.5
36.5	63	84.5	92
47.5	71.5	92.5	102.5
50	72.8(1+1)	100	110

p-Dimethylaminobenzaldehyde ($C_9H_{11}ON$) +
hydroquinone ($C_6H_6O_2$)

Osipenko and Titchenko, 1941

mol%	f.t.	mol%	f.t.
0	73	36.5	112
13	70	47.5	106
25	109.5	57.5	119.5
33.3	114 (2+1)	67	138

Allyl-phenyl-thiourea ($C_{10}H_{12}N_2S$) + Phenol (C_6H_6O)

Shishokin and Muskina, 1938

mol%	f.t.	mol%	f.t.
0	99	49.7	73
19.5	91	60.4	65
29.1	87	70.3	53.5
39.8	82.5	79.3	38
49.5	73		

Sulfonal ($C_7H_6O_4S_2$) + Thymol ($C_{10}H_{14}O$)

Quercigh and Cavagnari, 1912

E : 72% 29°

Sulfonal ($C_7H_6O_4S_2$) + Salol ($C_{13}H_{10}O_3$)

Quercigh and Cavagnari, 1912

E : 82.5% 34°

Nicotinamide ($C_6H_6ON_2$) + Pyrocatechol ($C_6H_6O_2$)

L. and A. Kofler, 1943

%	I	f. t.	II	III
0	129	-	-	-
16	112 E	-	-	-
(4+1)	112.5	-	-	-
-	-	95 E (+I)	-	-
-	-	91 E (+II)	-	-
41	102 E	-	-	75 E
-	-	99 E (+I)	-	-
(1+1)	103	100	-	79
-	-	95 E (+II)	-	-
62	96.5 E	-	-	-
-	-	-	-	57 E
(1+2)	97	-	-	-
79	85 E	-	-	-
100	104	-	-	-

Nicotinamide ($C_6H_6ON_2$) + 2.4-Dinitrophenol ($C_6H_4O_5N_2$)

L. and A. Kofler, 1943

%	I	f. t.	II
0	129	-	129
-	120 E	-	117 E
complex	130	-	126
-	102 E	-	99 E
100	113	-	113

Nicotinamide ($C_6H_6ON_2$) + 2.5-Dinitrophenol ($C_6H_4O_5N_2$)

L. and A. Kofler, 1943

%	I	f. t.	II
0	129	-	129
-	119 E	-	114 E
complex	124	-	115
-	97 E	-	94 E
100	105	-	105

Nicotinamide ($C_6H_6ON_2$) + 2.6-Dinitrophenol ($C_6H_4O_5N_2$)

L. and A. Kofler, 1943

%	I	f. t.	II
0	129	-	129
-	108 E	-	105 E
complex	116	-	112
-	57 E	-	56 E
100	59	-	59

2-Mercapto-4-methylthiazol ($C_4H_5NS_2$) + Resorcinol ($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	89	87	50	69	62
5	84	82	55	66	"
10	93	84	60	72	"
15	94	89	70	85	"
20	94.5	73	80.5	96	"
25	93.5	64	85	100	63
30	91	62	90	103	71
35	88.5	62	95	107	91
40	82	-	100	110	108
(3+1)	-	-	-	-	-

2-Mercapto-4-methylthiazol ($C_4H_5NS_2$) + p-Nitrophenol ($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	89	87	51.4	95.5	93.5
5.2	84	71	55	95	88.5
10	79.5	70	60	94	86.5
15	74	"	65	92.2	86.5
20	78	"	70	89.5	86.5
25	84	"	75	91.5	86.5
30	88.5	"	80	97	86.5
35	91	"	85.1	102	86.5
40.2	93	74	90	106	87
45.2	94.5	84	95	110	90
50	95.2	92	100	113 ₍₁₊₁₎	111

2-Mercapto-4-methyl-5-imidazole(ethyl)carbonate ($C_7H_{10}O_3N_2S$) + Resorcinol ($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	229	227	59.6	123	78
10-20	-	-	70	86	"
30	197	78	79.8	94	"
39.9	178	"	89.9	105	88
49.8	153.5	"	100	110	108

2-Mercapto-4-methyl-5-imidazole(ethyl)carbonate ($C_7H_{10}O_3N_2S$) + p-Nitrophenol ($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f. t.	E	%	f. t.	E
0	229	227	69.7	131	99
10-40	-	-	79.6	101	"
49.8	185	92	89.5	108	"
59.8	154	99	100	113	111

2,4-Dimethyl-5-carbethoxypyrrole ($C_9H_{13}O_2N$) +
Phenol (C_6H_6O)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	60	68.5
10	118	70	53
20	113	80	35
30	105.5	86	23 E
40	95	90	28
50	82.5	103	41

2,4-Dimethyl-5-carbethoxypyrrole ($C_9H_{13}O_2N$) +
Pyrocatechol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	60	77
10	117	66	71
20	111	70	77
30	105.5	80	88
40	97	90	97.5
50	87.5	100	105

2,4-Dimethyl-5-carbethoxypyrrole ($C_9H_{13}O_2N$) +
Resorcinol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	56.5	74.5 E
10	117.5	60	79
20	110	70	87
30	104	80	96
40	96	90	103
50	85	100	110

2,4-Dimethyl-5-carbethoxypyrrole ($C_9H_{13}O_2N$) +
Hydroquinone ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	40	117
10	117.5	50	132
20	112	60	143
30	107	70	152
32	106 E	80	159
40	117	90	167
		100	172

2,4-Dimethyl-5-carbethoxypyrrole ($C_9H_{13}O_2N$)
+ Picric acid ($C_6H_3O_7N_3$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	50	97
10	117	60	94 E
20	109	70	102
30	102	80	110
33.3	100 tr. t.	90	115
40	99	100	120
(1+1)			

2,4-Dimethyl-3-aldehyde-5-carbethoxy-pyrrole
($C_{10}H_{13}O_3N$) + Pyrocatechol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	143	50	114 (1+1)
10	137	60	112
20	129	70	103
30	118	80	88 E
36	111 E	90	97
40	112	100	105

2,5-Dimethyl-3-carbethoxy-4-aldehyde-pyrrole
($C_{10}H_{13}O_3N$) + Pyrocatechol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	150	60	70
10	143	67	56 E
20	137	70	61
30	126	80	84
40	112.5	90	97
50	95	100	105

2,4-Dimethyl-3-aldehyde-5-carbethoxy-pyrrole
($C_{10}H_{13}O_3N$) + Resorcinol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	143	60	107
10	136.5	70	95
20	127.5	75	86 E
30	116.5	80	95
40	107 E	90	105
50	111 (1+1)	100	111

2,5-Dimethyl-3-carbethoxy-4-aldehyde-pyrrole
($C_{10}H_{13}O_3N$) + Resorcinol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	150	60	81
10	142.5	61	80 E
20	135	70	90
30	123	80	100
40	112.5	90	107.5
50	98 tr. t.	100	111

(1+1)

2,4-Dimethyl-3-aldehyde-5-carbethoxypyrrole
($C_{10}H_{13}O_3N$) + Hydroquinone ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	143	50	136.5
10	137.5	60	130 E
15	134 E	70	143
20	137.5	80	155
30	142	90	164
40	141	100	172

(2+1)

2,5-Dimethyl-3-carbethoxy-4-aldehydypyrrole
($C_{10}H_{13}O_3N$) + Hydroquinone ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	150	57	116.5 E
10	142.5	60	121.5
20	135	70	140.5
30	125	80	154
37	115 E	90	163
40	116	100	172
50	117.5 (1+1)		

2,4-Dimethyl-5-carbethoxy-3-aldehydypyrrole
($C_{10}H_{13}O_3N$) + Picric acid ($C_6H_3O_7N_3$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	143	60	95.5 E
10	137	70	104
20	128	80	110
30	120	90	117
40	109	100	122
50	97 tr. t.		

(1+1)

2,4-Dimethyl-3-acetyl-5-carbethoxypyrrole
($C_{11}H_{15}O_3N$) + Phenol (C_6H_6O)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	141	55	93 tr. t.
10	136	60	87
20	132	70	65
30	126	80	47
40	167.5	90	27 E
50	103.5	100	41

(1+1)

2,4-Dimethyl-3-acetyl-5-carbethoxy-pyrrole
($C_{11}H_{15}O_3N$) + Pyrocatechol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	141	60	93
10	139	70	79
20	132.5	77	71 E
30	123	80	79.5
40	110	90	95
41	108.5 tr. t.	100	105
50	103		

(1+2)

2,4-Dimethyl-3-acetyl-5-carbethoxypyrrole
($C_{11}H_{15}O_3N$) + Resorcinol ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	141	50	130.5
10	137	60	119
19	132.5 E	70	100.5
20	133	78	84 E
30	138.5	80	86
33	139 (2+1)	90	101
40	138.5	100	110

2,4-Dimethyl-3-acetyl-5-carbethoxypyrrole
($C_{11}H_{15}O_3N$) + Hydroquinone ($C_6H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	141	60	137.5
10	138.2 E	62	135 E
20	148	70	142
30	152.5	80	154
33	153 (2+1)	90	164
40	151	100	172
50	146		

2,4-Dimethyl-3-acetyl-5-carbethoxypyrrole
($C_{11}H_{15}O_3N$) + Picric acid ($C_6H_3O_7N_3$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	141	60	94 E
10	136	70	100
20	128	80	107.5
30	120	90	114
40	110	100	121
50	97.8 tr. t.		

(1+1)

Phenylmethyl-pyrazolon ($C_{10}H_{10}ON_2$) +
Pyrocatechol ($C_6H_6O_2$)

Regenbogen, 1918

%	f. t.	tr. t.	%	f. t.
0	102.0	-	60.2	54.1
10.0	98.0	-	61.3	53.0
20.0	91.0	-	62.5	50
30.0	83	68.5	63.9	49°
38.5	70	68.5	65.5	60
42.0	68.8	-	67.7	68
44.2	68.9	-	72.3	86
50.0	65.9	-	76.0	92.5
55.2	61.0	-	80.0	98
57.7	58.0	-	88.2	104.5
60.0	53.8	-	93.7	114.5
60.0	55.0	-	100.0	121.0

(1+2) (1+1)

Phenylmethyl-pyrazolon ($C_{10}H_{10}ON_2$) +
Hydroquinone ($C_6H_6O_2$)

Regenbogen, 1918

%	f. t.	tr. t.	%	f. t.	E
0	168.0	-	63.1	96	-
10.0	164.0	-	65.1	95	-
20.0	157.0	-	65.9	95.5	-
30.0	149	-	67.3	93.0	-
38.6	137	-	69.6	90.0	-
42.9	132	-	72.1	87.8	-
46.2	125	-	72.3	89.8	-
50.0	118	91.5	76.0	85.8	-
54.5	108	93.0	76.0	87.1	-
56.6	105	95.0	80.0	84.8	-
59.3	96	94.0	88.2	101.3	-
60.0	-	94.5	93.7	112.0	-
61.1	-	95.0	100.0	121.0	-
61.2	96.5	-			

(1+1) (2+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Phenol (C_6H_6O)

Regenbogen, 1918

%	f. t.	E	%	f. t.	E
100	40.50	-	31.2	56.7	-
89.8	34.5	-	28.6	-	54.5
79.6	19	-	25.7	-	55
69.5	-	-	23.3	64	55
59.3	-	-	20.0	74	-
50.0	27.1	-	10.0	94.5	-
40.0	51	-	0.0	108.5	-
33.3	57.2	-			

(1+1)

Kremann and Haas, 1919

%	f.t.	E	%	f.t.	E
0	109.8	-	42.8	47.5	-
9.6	95.5	-	47.9	38	-
15.1	87	-	54.0	16.5	-
17.4	82	-	56.7-71.4	-	-
21.6	72	-	76.2	11	-
25.6	61	52.5	83.5	24	-
30.0	53.8	-	87.6	30.5	-
34.4	55.5	-	95.2	37.5	-
39.5	53	-	100.0	41	-

(1+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Pyrocatechol ($C_6H_6O_2$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	103	-	34.0	57	56.2
90	100.2	-	32.4	-	-
80	91.5	-	30.8	60	57.3
70	71	-	29.6	22	-
61.4	69	-	26.6	64	-
54.8	74	-	26.3	52	-
53.9	74	-	22.6	69	-
49.3	71.5	-	22.6	66.7	-
46.4	69	57.5	20.0	76	-
44.9	68	-	18.8	76	66.7
43.4	64.3	58.0	17.7	82	-
41.2	58	-	15.5	88	-
40.0	58	-	14.7	88.5	66.0
38.2	46	-	11.8	95.5	-
36.9	59.0	-	10.0	98.5	-
36.9	40	-	6.3	105	-
(2+1)	(1+1)	(1+2)	0.0	108.5	-

Kremann and Haas, 1919

%	f.t.	E	%	f.t.	E
100	103	-	41.9	56.5	-
94.1	101	-	41.1	-	57
89.3	98	-	40.1	51	-
81.0	90	-	36.7	58.7	-
77.5	85	57	36.5	55.8	-
70.4	67	-	33.5	57.5	-
66.0	62	-	30.0	57	57
61.4	68.8	-	26.4	62.3	54
60.7	69.5	-	24.5	65	-
58.1	71.5	-	23.9	65.2	-
56.1	73	-	23.5	65.3	-
55.5	73.5	-	23.1	58	-
55.0	73.5	-	21.8	65.5	-
54.1	73.6	-	20.3	71	-
53.0	72.8	-	19.2	76	65.2
51.5	72.3	-	18.1	78.2	-
50.3	71.5	-	14.5	89.2	-
48.4	70.3	-	10.9	94.5	-
47.3	67.5	-	8.4	99.5	-
47.2	68	56	5.5	103.5	-
44.2	62.5	57	0	109.8	-
44.1	62.5	-	(1+2)	(1+1)	(2+1)

Hrynakowski and Adamanis, 1935

mol%	f.t.	E	min.
100	104	-	-
96.7	102.0	-	-
93.9	98.0	-	-
90.5	95.0	-	-
87.2	89.0	63.0	0.6
83.7	82.2	64.5	0.7
79.9	74.0	"	0.8
76.8	64.5	"	-
76.0	66.0	"	0.8
71.9	70.0	-	-
67.6	75.0	-	-
66.7	75.6(1+2)	-	-
63.1	73.5	-	-
58.3	75.5	58.0	0.6
55.3	58.0	"	-
53.3	58.5	-	-
50	60.0(1+1)	-	-
48	59.5	-	-
45.6	59.0	59.0	-
42.3	62.0	59.0	0.4
36.3	66.0	-	-
33.4	66.5(2+1)	-	-
32.5	65.2	65.2	-
30	72.0	"	0.8
23.1	88.0	"	0.6
16	97.0	-	-
8.2	101.0	-	-
0	112	-	-

Hrynakowski, 1934

Eutectics .

22.0 %	: 65.2	42.0 %	: 56.0
32.0 %	: 59.0	66.0 %	: 64.0

Antipyrine ($C_{11}H_{12}ON_2$) + Resorcinol ($C_6H_6O_2$)

Quercigh and Cavagnari, 1912

(1+1)	104°	E ₁ : 62°	E ₂ : 55.5°
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Regenbogen, 1918

%	f.t.	%	f.t.
100	108.2	35.0	91
90	103.8	32.4	92
80	93	28	83
70	67	25.5	73
52.7	53	23.3	70
47.4	70	20	62
40.8	91.5	10	92.5
40	88	0	108.5
36.9	90.3		

(1+1) (2+1)

Kremann and Haas, 1919					
%	f. t.	E	%	f. t.	E
100	109	-	38.3	100.2	-
93.5	105.9	-	37.0	100.5	-
86.3	99	-	33.5	99.7	-
77.3	89	-	30.3	95.5	52.5
70.8	72	-	26.7	82	"
63.3	-	-	24.6	64.5	-
51.5	69	-	22.8	52.5	52.5
49.9	76	-	20.9	60	-
48.5	80	-	18.9	68.5	-
46.9	85.5	-	17.5	74	-
45.3	90.5	-	15.3	78	-
43.0	94.5	-	15.0	80.5	-
41.1	98	-	12.6	86	-
39.5	99.7	-	10.0	92	-
(1+1)			8.4	95.5	-
			0	109.8	-
Hrynakowski and Adamanis, 1934					
mol%	f. t.		mol%	f. t.	
0	112.2		63.2	90.5	
8.3	105.0		67.7	80.0	
16.0	95.0		72.0	67.0	
23.2	83.0		76.1	56.0	E
30.0	77.0	E	80.0	75.5	
36.4	91.0		83.7	86.0	
42.4	99.0		89.3	95.0	
48.0	101.0		90.7	100.5	
50.0	103.0	(1+1)	93.9	105.0	
53.4	101.0		97.0	107.5	
58.4	96.5		100.0	110.0	
Antipyrine ($C_{11}H_{12}ON_2$) + Hydroquinone ($C_6H_6O_2$)					
Regenbogen, 1918					
%	f. t.	E	%	f. t.	E
100	167.5	-	43.4	125.8	-
90	165	-	38.9	123	116.5
80	158	-	33.7	116.5	"
70	146	-	29.6	123	-
61.9	130	119	26.3	127.0	-
61.4	127.5	-	22.6	128.0	-
60.	124	-	20	127.0	-
58.5	121	-	17.7	124.0	-
57.8	119	119.0	11.8	117	101.5
53.6	121.0	118.2	6.25	101.5	"
48.4	126.8	-	0	108.5	-
46.7	127.0	-			
(2+3)	(2+1)				
Kremann and Haas, 1919					
%	f. t.	E	%	f. t.	E
100	168	-	45.9	129	-
93.1	165	-	42.8	127.5	-
88.7	162.5	-	39.4	125	-
81.8	158	-	35.1	118	118
76.3	152	-	28.9	125	-
69.7	142	-	24.2	129	-
53.4	129	-	19.4	128.5	-
59.7	120	-	13.2	117.5	-
56.2	121.5	116.5	10.3	112	101
52.3	126	-	4.2	104.8	-
49.7	128	116.5	0	109.8	116.5
(2+3)	(2+1)				
Rheinboldt, 1925					
%	f. t.	E	%	f. t.	E
100	172.0	171.5	36.2	122.5	118.5
84.2	161.0	121.0	34.9	121.0	"
82.5	158.0	120.5	29.6	130.5	"
76.5	151.0	"	29.1	130.5	"
72.5	146.0	"	24	134.0	122.0
62.6	130.0	"	19.8	130.5	103.0
61.4	125.0	"	17.2	128.0	102.0
56.5	123.5	"	11	116.0	102.5
55.3	123.5	"	10.5	115.5	"
50.8	125.0	"	6.3	104.5	"
49.4	129.5	"	4.2	109.0	102.0
43.5	127.5	118.5	0	113.0	112.0
38	124.0	"			
(2+3)	(2+1)				
Hrynakowski, 1934					
Eutectics					
6.5%	:	101.0			
34.0%	:	118.0			
58.5%	:	116.5			
Kofler, 1940					
Eutectics.					
%	f. t.				
0	112				
-	102	(A + complex 1)			
-	118	(complex 1+2)			
-	120	(B + complex 2)			
100	172.5				
Taboury and Gray, 1944					
(2+1)	(2+3)				

Antipyrine ($C_{11}H_{12}ON_2$) + Pyrogallol ($C_6H_3O_3$)

Regenbogen, 1918

%	f. t.	%	f. t.	E
100	121	32.2	60	59.1
90	116	30	50	-
80	109	28.8	64	-
70	84	25.1	64.9	-
64	50	25	40	-
59.2	-	20.9	68	64.0
55.1	40	20	70	-
50.1	60	16.3	84	61.9
43.8	66	15.5	89	-
40.1	67	11.8	95	-
40	67	10	96	62
36.5	64	6.3	106	-
36	64	0	108.3	-

(1+1) (2+1)

Kremann and Haas, 1919

%	f. t.	%	f. t.
100	126	21.2	59.5
94.5	123.2	18.2	76
87.6	119.2	12.5	90
82.4	116	8.1	99.9
74.6	107	2.2	108.2
70.3	95.5	0	109.8
63.8	59		

Antipyrine ($C_{11}H_{12}ON_2$) + o-Cresol (C_7H_8O)

Regenbogen, 1918

%	f. t.	%	f. t.	E
100	29.8	36.5	20	-
93.8	27.3	33.8	54.8	-
88.2	24	33.4	37	-
81.1	17	30.9	54	54
71.4	-	30	55	-
60	-	27.4	66	54
58.6	19	26.1	70	-
55.6	28	22.3	78	-
54.5	30	18	85.5	-
50	39	13.3	93.5	-
46.4	46	8	99	-
43.4	50	0	108.5	-
40	53.8			
36.5	56.0	(1+1)		

Antipyrine ($C_{11}H_{12}ON_2$) + m-Cresol (C_7H_8O)

Regenbogen, 1918

%	f. t.	%	f. t.
39.4	0	23	71.5
35	29	13.1	94
29.7	52	0	108.5

Antipyrine ($C_{11}H_{12}ON_2$) + p-Cresol (C_7H_8O)

Regenbogen, 1918

%	f. t.	%	f. t.
100	33.9	30	56
93.8	30	26.1	66
88.2	24.5	22.3	77
40	-	18	85
36.5	20	13.3	94
33.4	42	8	100.5
		0	108.5

Antipyrine ($C_{11}H_{12}ON_2$) + Guaiacol ($C_7H_8O_2$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	27.3	37.5	57
93.8	24.7	34.8	62
88.2	21.3	30	73.5
78.9	15.5	24.8	83
71.7	3	18.3	91.5
60-50	-	10	100.5
44.4	30	0	108.5
40	48		

Antipyrine ($C_{11}H_{12}ON_2$) + Thymol ($C_{10}H_{14}O$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	48.9	40	55
93.8	45.9	31.8	75
88.2	42.8	28.5	81
83.3	40.5	24.9	87
76.1	30	20	92.5
70-47.8	-	10	102
45.5	31	0	108.5
42.9	45		

Antipyrine ($C_{11}H_{12}ON_2$) + Eugenol ($C_{10}H_{12}O_2$)

Regenbogen, 1918

%	f. t.	%	f. t.
55.5	31	30	85.5
50	44	19.2	98.5
44.7	62	8.6	106.5
38	73.5	0	108.5

Antipyrine ($C_{11}H_{12}ON_2$) + Salicyl alcohol
($C_7H_8O_2$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	81.1	53.3-36.2	-
90	76.9	30	55
80	70	24.8	72
70	57	20	83
65.4	51	10	98
60	40	0	108.5
56.9	29		

Antipyrine ($C_{11}H_{12}ON_2$) + Methyl-p-Oxybenzoate
($C_8H_8O_3$)

Pfeiffer and Seydel, 1928

%	f. t.	%	f. t.
0	112	50	60
20	94	60	84
35	70	80	113
40	48	100	127
45	35.5		

Antipyrine ($C_{11}H_{12}ON_2$) + Ethyl-p-Oxybenzoate
($C_9H_{10}O_3$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	112.0	40.6	42
90	108.5	35.1	63
80	98	30.6	76
70	80	25.4	85
63.8	68	18.1	95
58.2	54	9.1	103
53.6	25	0	108
46.9	-		

Antipyrine ($C_{11}H_{12}ON_2$) + Salol ($C_{13}H_{10}O_3$)

Bellucci, 1912

%	f. t.	E	min.
100	42	-	-
90	35	30	6
80	34	29	12
70	53	29.4	10
60	65	29.6	9
50	75	30	7
40	83	29.1	6
30	91	29.7	5
20	98	30	3
10	104.5	29.6	2
0	112.6	-	-

Regenbogen, 1918

%	f. t.	%	f. t.
100	41.0	54.7	77
95.2	38.0	53.2	77
90.9	35.4	49.9	80.5
90	35.0	45.5	81.5
87	33.3	42	87
83.3	34.3	37.7	88.5
80	42	19.2	100
70	58	9.5	107.5
61.4	71	0	108.0
57	72.5		

Adamanis, 1933

mol%	f. t.	mol%	f. t.
0	112.0	51.8	75.5
4.4	107.0	56.9	70.0
8.9	104.5	62.1	66.0
13.5	101.0	67.2	57.0
18.1	98.0	72.5	51.0
22.7	94.2	77.9	41.0
27.4	91.0	83.3	34.0
32.2	89.5	88.8	36.5
37.0	86.0	94.3	39.0
41.9	82.5	100	42.0
46.8	78.5		

E : 82.1 mol% 33.0°

Quercigh and Cavagnari, 1912

E : 98.9% 31.5°

Antipyrine ($C_{11}H_{12}ON_2$) + Salacetol ($C_{10}H_{10}O_4$)

Regenbogen, 1918

%	f. t.	E	%	f. t.	E
100	68.3	-	48.3	76	-
90	63.5	-	44.4	79.5	-
80	58	52.3	38.1	82.5	52.7
73.2	54	53.0	34	87.5	52.9
67.4	-	-	30	91.5	-
60.6	62	-	20	99	-
53.8	69	-	10	104	-
50.8	71.5	53.0	0	108.0	-

Antipyrine ($C_{11}H_{12}ON_2$) + Salipyrine ($C_{16}H_{18}O_4N_2$)

Hrynakowski and Adamanis, 1935

mol%	f. t.	E	min.
0	112	-	-
2.9	108.5	-	-
6	106.4	-	-
9.2	104.5	75.5	0.6
12.6	103.0	"	0.9
16.1	101.5	"	1.2
19.8	98.0	"	1.2
23.7	94.5	"	2.1
27.8	93.0	"	2.4
32.1	90.1	"	2.7
36.6	85.5	"	3.0
41.4	83.1	"	4.2
46.4	79.5	"	4.8
51.7	77.7	"	5.1
53.9	75.5	"	-
57.4	77.5	"	4.8
63.4	82.0	"	4.5
69.8	86.5	"	3.0
76.6	88.0	"	2.4
83.9	89.0	"	1.5
91.6	90.5	-	-
100	92	-	-

Hrynakowski, 1934

E : 67% 75.5°

Antipyrine ($C_{11}H_{12}ON_2$) + o-Aminophenol (C_6H_7ON)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	112	110	40	99	52
14	95	52	50	129	"
20	85	"	60	148	"
26	72	"	80	165	"
30	58	"	100	174	174
35	77	"			

Antipyrine ($C_{11}H_{12}ON_2$) + o-Nitrophenol ($C_6H_5NO_3$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	44.0	42.5	57
90	40.0	40	62
80	35.3	37.5	68
70	29.2	34.8	73
64	24.2	30.4	79
60	20.0	27	83.2
54.5	16.0	24	87
50	39.0	20	92
44.6	51.5	10	101
		0	108.5

Kremann and Haas, 1919

%	f. t.	E	%	f. t.	E
100	43.5	-	49.1	32	-
93.6	41	-	45.6	47	13
89.4	39	-	39.8	59	-
81.4	35.3	-	33.9	69.5	-
74.7	31	-	26.1	81.5	-
69.9	27.5	-	21.3	88	-
65.3	24	13	12.3	97.3	13
59.4	18.5	-	6.9	102.5	-
56.4	16.2	-	0	109.8	-
53.1	13	13			

Antipyrine ($C_{11}H_{12}ON_2$) + m-Nitrophenol ($C_6H_5NO_3$)

Regenbogen, 1918

%	f. t.	%	f. t.	E
100	93.2	40	-	-
90	87.5	40	56.9	-
80	78	37.5	36	-
70	56	37	55	-
64	42.5	34.8	53	-
60	-	33.3	59	53.0
54.5	42	30.4	68.5	-
50	51	27	77	-
47.4	53	24	83	-
44.6	56	20	91	-
42.5	57.5	10	104	-
(1+1)		0	108.5	-

Kremann and Haas, 1919

%	f.t.	%	f.t.	%	f.t.
100	94.8	32.7	56	18.6	87
94.9	91	29.7	66	17.3	88.2
89.2	85	27.0	71.5	16.0	90.6
85.3	80.2	26.6	73.0	11.7	98
79.3	66.5	24.5	77	10.2	98.8
75.0	56	22.4	81.8	5.1	103.5
71.5	42	22.2	81.5	4.0	105.2
68.3	-	20.9	83	0	109.8
34.2	47.0				

Antipyrine (C₁₁H₁₂ON₂) + p-Nitrophenol (C₆H₅NO₃)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	110.0	-	42.5	99.2	-
90	102.0	-	40	98.8	-
80	89	68.3	37.5	96.3	-
70	70	68.4	34.8	94	-
64	76.8	-	30.4	88	79.5
60	78.6	-	27	-	80.0
54.5	86	-	24	-	80.0
50	92	-	20	86	80.0
47.4	95.1	-	10	98.5	-
44.6	98.7	-	0	108.5	-
		(1+1)			

Kremann and Haas, 1919

%	f.t.	E	%	f.t.	E
100	111.5	-	46.0	97.8	-
91.8	104.8	-	43.5	99.15	-
86.4	98.5	-	40.1	97.8	-
82.7	93	-	38.2	96.4	-
80.1	88	-	36.1	94	-
76.9	81.5	67	34.1	92	-
74.8	76.5	67	32.2	90.1	-
72.2	67	67	29.9	85.5	-
69.6	70	-	27.7	81.8	-
67.5	72.8	67	24.8	79.9	-
65.5	74.8	-	23.0	79	79
64.1	76.3	-	21.8	80	79
63.9	76.5	67	18.5	86	-
60.3	79	-	14.8	93.1	79
56.5	78.5	78.5	11.0	98.2	-
53.0	85.5	-	6.3	103.5	-
51.9	87.7	-	0	109.8	-
49.4	92	-			
	(1+2)	(1+1)		(2+1)	

Antipyrine (C₁₁H₁₂ON₂) + 2,4-Dinitrophenol (C₆H₄O₅N₂)

Kremann and Haas, 1919

%	f.t.	%	f.t.	%	f.t.
0	109.8	26	81.5	70.5	77.5
3.2	106.5	30.4	75.5	76.3	86.5
8	101	34.5	68	80.7	93
11.8	98	38.9	58	86.5	98
17.2	92	62.2	60	93.2	104.1
21.5	87.9	66.2	69	100	110.5

Antipyrine (C₁₁H₁₂ON₂) + Picric acid (C₆H₃O₇N₃)
Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	118.9	-	44.3	176	-
93.8	116	115.9	39.8	165	-
88.2	135	116	34.6	135	-
82.2	148	-	28.3	96	75.3
75	160.5	-	17.8	83	76.0
63	174	-	11.8	94	-
57.6	177.5	-	6.3	101.8	-
51.9	180	-	0	108.5	-
48.5	177	-		(1+1)	

Antipyrine (C₁₁H₁₂ON₂) + α-Naphthol (C₁₀H₈O)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	94.0	-	43.7	53	-
90	89.5	-	41	61	-
80	76	-	36	67.5	-
70	33	-	30	72	-
60.9	-	-	27.7	73.8	-
55.0	-	-	25	78.5	-
53.8	37	-	24.4	81	72.8
50	45	-	22.6	85	-
46.1	51	-	20	91	71.0
45.3	49	-	10	104	-
			0	108.5	-

Kremann and Haas, 1919

%	f.t.	E	%	f.t.	E
100	92.7	-	33.7	69.5	73
96.1	91	-	30.2	72.5	"
92.1	88.2	-	28.8	72.8	"
87.0	73	-	27.9	73	"
80.4	71	-	21.5	87.5	"
78.1	59.3	-	24.2	82.1	-
72.0	-	-	18.7	92	73
44.2	-	-	15.6	95.5	"
42.6	51	73	15.0	96.3	"
39.4	58	-	7.9	104	-
37.1	61.5	73	0	109.9	-
34.1	68	"		(2+1)	

Antipyrine (C₁₁H₁₂ON₂) + β-Naphthol (C₁₀H₈O)

Quercigh and Cavagnari, 1912

E : 38.5 % 17.5°

Regenbogen, 1918

%	f.t.	%	f.t.	%	f.t.
100	119.8	40.2	51	25	78
90	113.5	39.4	52	22.6	82
80	97	35.6	57	20.7	87
70	56	31.2	66	20	90
43.4	45	30	72	10	102
43.4	30	27.7	74	0	108.2

Kremann and Haas, 1919

%	f. t.	E	%	f. t.	E
0	109.8	-	42.3	79.5	-
3.2	106.3	-	46.0	79.5	-
5.0	104.0	-	50.5	73.0	67.5
7.3	101.8	-	54.2	-	67.5
11.9	97	-	72.6	70	-
12.9	97	-	74.5	80	-
17.3	90.5	-	76.4	87	-
19.0	87.5	72	80.6	96	-
21.3	84.8	-	82.2	98	-
23.7	80.5	-	87.1	106.5	-
26.5	76.5	-	87.4	106.5	-
27.5	75.5	72	91.8	112.8	-
31.2	67	-	93.8	115.5	-
35.7	75.5	-	100	122	-
38.9	78.5	-		(1+1)	

Antipyrine ($C_{11}H_{12}ON_2$) + Betol ($C_{17}H_{12}O_3$)
Regenbogen, 1918

%	f. t.	E	%	f. t.	E
100	91.0	-	51.5	79.5	68.8
90.9	84.3	-	47.3	82.5	-
83.3	79.0	-	42.2	87	-
75	74	-	37.4	90	66
68.2	-	70.0	30	95	-
63.3	71	"	20	102	-
59.3	74.5	"	10	106	-
54.9	77.5	-	0	108	-

Antipyrine ($C_{11}H_{12}ON_2$) + Quinine ($C_{20}H_{24}O_2N_2$)

Adamonis, 1933

mol %	f. t.	mol %	f. t.	mol %	f. t.
100	175	51.9	133.5	19.9	99.0
91.7	168.2	46.5	127.8	16.2	101.8
83.9	161.5	41.5	120.0	12.7	103.5
76.7	158.0	36.7	111.2	9.3	105.0
69.9	152.5	32.2	107.2	6.1	107.0
63.5	146.0	27.9	94.2	3.0	108.8
57.5	140.0	23.8	95.2	0	112
E : 27.1 mol % 91.0°					

Pyramidon ($C_{13}H_{17}ON_3$) + Hydroquinone ($C_6H_6O_2$)

Regenbogen, 1918

%	f. t.	E	%	f. t.	E
100	167.4	-	39	94	-
90	164.0	-	36.6	95.5	-
80	158.9	-	32.3	97.9	-
70	149	-	28.6	95.5	92
64	140	-	24.1	93.9	-
55.8	131.5	-	20	96.8	-
52.3	123	-	15.5	94.0	-
48.3	110	-	11.8	83	73.0
41.7	95.0	92.2	6.3	93.5	-
	(1+1)	(2+1)	0	102.8	-

Pyramidon ($C_{13}H_{17}ON_3$) + Pyrocatechol ($C_6H_6O_2$)

Regenbogen, 1918

%	f. t.	E	%	f. t.	E
100	103.3	-	39	73.4	-
90	99.6	-	35.9	76.1	-
80	92.0	-	32.3	77.9	-
70	78.0	55.2	28.6	76.3	-
64	65.5	"	24.1	71.3	67.8
58.8	-	"	20	68.4	-
55.8	56.2	-	15.5	76.3	-
52.3	62.0	-	11.8	85.6	-
48.3	64.5	-	6.3	95.2	-
45.2	63.9	-	0	100.0	-
41.7	70.0	63.0		(1+1) (1+2)	

Pyramidon ($C_{13}H_{17}ON_3$) + Methyl-p-Oxybenzoate
($C_8H_8O_3$)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	108	107	45	51	32
20	88	32	51	77	"
30	71	"	60	96	"
35	57	"	70	111	"
40	43	"	80	120	"
41	40	-	100	127	124
43	38	-			

Pyramidon ($C_{13}H_{17}ON_3$) + o-Aminophenol (C_6H_7ON)

Pfeiffer and Seydel, 1928

%	f. t.	E	%	f. t.	E
0	107	106	40	130	70
10	95	70	50	150	"
15	86	"	60	162	"
20	74	"	80	171	"
25	87	"	100	174	174
30	105	"			

Acetylthiourea (C_3H_6ONS) + Resorcinol ($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	165	163	60	90	79
10	159	98	70	87	"
20	149	79	80	98	"
30	138	"	90	105	"
40	123.5	"	100	110	108
50	110	"			

Acetylthiourea (C_3H_6ONS) + p-Nitrophenol
($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	165	163	60	108	88
10	161	111	70	92	"
20	154	88	80	99	"
30	144	"	90	106.5	"
40	134	"	100	113	111
50	123	"			

Allyl thiourea ($C_4H_8N_2S$) + β -Naphthol ($C_{10}H_8O$)

Kofler and Brandstatter, 1942

%	f.t.
0	70.5
-	54 E

Phenylthiourea (C_7H_8NS) + Resorcinol ($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	154	152	49	83	71
10.3	146.5	86	55.5	75.5	"
17	139	72	58	73	"
19	137	71	59.6	73	"
23.3	134	"	65.9	78	"
30.9	119	"	70.3	94	"
33	115	"	82	104	"
35.5	109	"	88.3	106	81.5
38.1	102	"	95.3	108	98
43.3	92	"	100	110	108
47.6	85.5	"			

Phenylthiourea (C_7H_8NS) + p-Nitrophenol ($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	154	152	60	88	80
10	142	85	70	89.5	80
20	136	77	80	101	81
30	126	"	90	109	93
40	117	79	100	113	111
50	102	80			

Benzylthiourea ($C_8H_{10}NS$) + Resorcinol ($C_6H_6O_2$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	159	157	59.5	91	84
9.2	157	122	62	86	"
14.6	152	102	63.7	88	"
20	146	88	68	92	"
25.2	140	84	76	102	"
28.4	137	"	79.7	104	"
35.1	129	"	84.3	105.5	86
39.5	122	"	91	108	93
44.2	115	"	95.8	109	100
50	107	"	100	110	108
54.8	99	"			

Benzylthiourea ($C_8H_{10}NS$) + p-Nitrophenol
($C_6H_5O_3N$)

Ochiai and Kuroyanagi, 1941

%	f.t.	E	%	f.t.	E
0	159	157	64.9	99	87
20	146.5	88	70	90	"
25.8	142.5	84	72	92	"
29.2	139	"	75	96	"
35.2	134	"	80	100.5	88
39.6	130.5	"	85	104	89.5
49.6	120.5	"	90	108	90
50.2	120	"	100	110	108
56	112	85			
59.9	107	86			

Tetranitro-pentaerithrite ($C_5H_8O_{12}N_4$) +
Picric acid ($C_6H_3O_7N_3$)

Pushin and Kozuhar, 1947

%	f. t.	E	%	f. t.	E
100	122	-	40	110	88
90	114	-	30	117	82
80	108	-	20	125	84
70	100	-	10	134	80
60	94	94	0	141	-
50	103	91			

Nitromannite ($C_6H_8O_{18}N_6$) + p-Nitrophenol
($C_6H_5O_3N$)

Urbanski, 1934

%	f. t.	E	%	f. t.	E
100	114.7	-	40	95.8	95.6
90	110.6	76.9	30	98.0	95.6
80	108.8	90.0	20	101.9	91.2
70	106.1	93.4	10	105.6	87.0
60	103.3	94.1	0	112.0	-
50	100.5	95.6			

Hexogen ($C_3H_6O_6N_6$) + Picric acid ($C_6H_3O_7N_3$)

Urbanski and Rabek-Gavronska, 1934

%	f. t.	E	%	f. t.	E
100	121.8	-	70	145.1	
95	117.5	112.9	60	156.4	112.2
90	113.6	"	50	165.8	111.4
85	117.1	"	40	175.1	111.1
80	126.2	"	30		
		"	0	205.5	-

Nitroglycerine ($C_3H_5O_9N_3$) + Dinitrochlorhydrin
($C_3H_5O_6N_2Cl$)

Kast, 1906

%	f. t.	m. t.
0	+13.2	-
9.9	+13.4	13.1
20	+ 9.0	8.0
30	+ 7.0	5.5
12	+ 4.0	2.8
29.4	- 0.8	-
96	- 8.1	-12.5
100	+ 6.8	+ 3.8

Nitrobenzene ($C_6H_5O_2N$) + Phenol (C_6H_6O)

Dahms, 1895

%	f. t.	%	f. t.
0.0	+5.520	50.23	-7.4
0.512	5.227	59.14	+2.7
2.472	4.255	66.13	+10.25
5.84	2.65	74.53	19.0
12.44	-0.70	80.46	24.2
24.82	-6.8	86.00	28.8
34.10	-11.6	95.590	36.26
41.32	-15.5	99.313	39.09
42.0	-16.55	100	39.59
43.60	-15.6		

Ampola and Carlinfanti, 1895

%	f. t.	%	f. t.
0	3.84	5.59	-0.06
1.07	2.97	7.73	-1.29
2.26	2.16	10.98	-3.26
3.58	1.34	14.72	-5.50

Paterno, 1896

%	D f. t.	%	D f. t.
0.93	-0.55	12.52	-7.58
2.18	1.26	15.69	9.79
4.57	2.62	23.73	15.65
8.17	4.84		

Hrynakowski, Staszewski and Szmytówna, 1937

%	f. t.	E	%	f. t.	E
100	40.5	-	45.0	-7.5	-16.7
88.5	32.5	-	32.0	-14.2	-16.4
78.5	25.3	-17.0	30.0	-12.3	-17.0
68.5	16.5	-16.5	23.5	-9.2	-
59.5	7.2	-16.4	16.0	-4.2	-
55.0	3.0	-16.4	7.5	+0.8	-
49.4	-3.0	-17.2	0	+5.9	-

Bramley, 1916

%	d	η	%	d	η
20°					
0.00	1.2021	1931	49.73	1.1346	3530
4.16	.1957	1975	58.64	.1233	4190
8.84	.1888	2041	71.03	.1085	5400
18.12	.1756	2208	84.68	.0927	7590
27.41	.1635	2460	100.00	.0752	11040
37.96	.1495	2845			

Nitrobenzene (C ₆ H ₅ O ₂ N) + Resorcinol (C ₆ H ₆ O ₂)				Nitrobenzene (C ₆ H ₅ O ₂ N) + p-Cresol (C ₇ H ₈ O)			
Mortimer, 1923				Ampola and Carlinfanti, 1895			
mol%	f. t.	mol%	f. t.	%	f. t.	%	f. t.
6.6	20	55.3	80	0.58	3.54	10.41	-1.69
16.0	40	83.3	100	1.52	2.95	14.10	-3.64
32.2	60	100.0	110.2	3.27	2.02	19.05	-6.01
				5.96	0.51	0	+3.84
Timmermans, 1956				Nitrobenzene (C ₆ H ₅ O ₂ N) + Thymol (C ₁₀ H ₁₄ O)			
t	FP(kl)	t	FP(kl)	t	tr. t.		
0%		50%		10%			
5.7	1	85	325	35	250		
30	1090	90	725	45	420		
50	2000	100	1050	50	450		
70	3010			60	250		
90	4100			70	50		
10%		100%		50%			
20	1000	(Bridgman)		15	1100		
35	650			25	890		
45	500	75	1	45	525		
50	520	44	500	65	150		
60	700	20	1000				
70	1000	6	1500	90%			
		-2	2000	15	1160		
		-6	2500	30	760		
55	220			50	430		
60	450			65	175		
70	580						
80	750						
85	1000						
Nitrobenzene (C ₆ H ₅ O ₂ N) + m-Cresol (C ₇ H ₈ O)				Nitrobenzene (C ₆ H ₅ O ₂ N) + Picric acid (C ₆ H ₃ O ₇ N ₃)			
Trew and Spencer, 1936				Mindovich and Gorbachev, 1953 (fig.)			
mol%	d	n _D	mol%	d	n _D	%	
28°						r	
0	1.194	1.54928	59.1	1.097	1.54282	2	0.26550
10.1	.177	.54794	69.2	.081	.54166	10	.26150
19.3	.162	.54685	78.8	.063	.54029	20	.25675
29.3	.144	.54560	89.9	.045	.53860	25	.25425
34.2	.128	.54503	100	.029	.53812	r= specific refraction = (n ² -1)/(n ² +1).l/d	
51.5	.108	.54387					
25°						r	
0	1.198	0.502	57.78	1.103	0.593	2	0.2654
12.98	.176	.522	73.20	.075	.620	10	.2637
27.20	.152	.543	87.20	.051	.650	15	.2627
41.48	.128	.566	100.00	.030	.672	20	.2617
47.90	.117	.578				r= specific refraction = (n ² -1)/(n ² +1).l/d	
U Q mix							
0	0.355	-	60.4	0.449	-1.03		
13.8	.381	-1.00	79.0	.490	0.57		
26.3	.395	1.27	100	.515	-		
42.5	.416	1.30					
Nitrobenzene (C ₆ H ₅ O ₂ N) + Benzene. Picric acid (C ₁₂ H ₉ O ₇ N ₃) complex				Mindovich and Gorbachev, 1953 (fig.)			
				%			
				r			
				2			
				10			
				15			
				20			
				r= specific refraction = (n ² -1)/(n ² +1).l/d			

Nitrobenzene ($C_6H_5O_2N$) + p-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b. t.
0	210.75
92	219.9 Az
100	219.75

Hrynakowski and Szmyt, 1938

%	f. t.	%	f. t.
100	38.00	40	-22.50
90	34.50	30	-10.00
80	25.60	20	+1.00
70	15.50	10	+4.00
60	2.50	0	+5.90
50	-11.40		

 Nitrobenzene ($C_6H_5O_2N$) + Trichlorphenol sym.
($C_6H_3OCl_3$)

Hrynakowski and Szmyt, 1938

%	f. t.	E	%	f. t.	E
100	67.00	-	50.00	28.20	-
88.68	55.30	-	40.00	23.80	2.00
80.00	44.30	28.70	29.40	14.00	"
75.00	40.00	27.00	19.61	6.00	"
69.00	33.70	-	10.00	3.00	0.80
66.00	31.40	-	5.00	5.00	-
62.00	30.80	-	0.00	5.90	-
56.10	29.30	-			

(1+1) f. t. = 31°

 o-Dinitrobenzene ($C_6H_4O_4N_2$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0.0	115	-	53.7	86	84
9.0	111.5	-	63.9	88	84
21.1	105	-	74.6	93	-
30.8	100	84	86.4	99	-
39.4	94	-	100	105	-

 o-Dinitrobenzene ($C_6H_4O_4N_2$) + m-Aminophenol
(C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f. t. I	E	f. t. II
100.0	117	-	-
95.0	116	-	-
85.5	112.5	-	-
75.0	107.5	-	-
70.2	105.5	89.0	-
56.5	97.0	-	-
56.3	-	-	81.5
53.1	-	-	84.0
48.8	-	-	87.0
45.0	89.0	-	-
40.5	92.5	88.0	-
36.0	95.0	89.0	-
31.5	97.5	-	-
25.5	101.0	-	-
21.7	103.0	-	-
17.2	105.5	-	-
12.8	158.0	-	-
8.5	110.5	-	-
0.0	115.7	-	-

 m-Dinitrobenzene ($C_6H_4O_4N_2$) + Thymol ($C_{10}H_{14}O$)

Pushin, Marich and Rikovski, 1948

mol%	f. t.	E	mol%	f. t.	E
100	51	-	40	61	36
90	47	37	30	69	32
80	43	39	20	76	-
70	39	39	10	84	-
60	46	39	0	91	-
50	53	38			

 m-Dinitrobenzene ($C_6H_4O_4N_2$)
+ m-Oxybenzaldehyde ($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.
0.0	87.5	-	57.4	79
12.2	78.5	-	63.9	83
28.22	66.5	63	73.1	89
40.93	68.5	63	84.5	96
49.73	74	-	100	105

m-Dinitrobenzene ($C_6H_4O_4N_2$) + m-Aminophenol
(C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	E	%	f. t.	E
100.0	118.0	-	28.9	79.0	-
95.2	116.9	-	28.3	78.0	-
88.7	113.0	-	23.6	75.5	-
80.5	109.0	-	22.6	74.5	-
72.5	104.0	-	20.0	76.0	74.5
66.7	101.0	74.0	21.6	75.5	74.5
53.3	94.5	-	17.0	78.0	74.5
47.7	91.0	74.5	14.0	80.5	-
45.3	89.5	-	9.8	82.5	-
37.5	84.5	74.5	7.1	84.5	-
35.3	83.0	-	4.0	86.5	-
32.9	82.0	-	0.0	89.0	-

m-Dinitrobenzene ($C_6H_4O_4N_2$) + 2,4-Dinitro-
phenol ($C_6H_4O_5N_2$)

Brandstätter, 1947

%	f. t.	%	f. t.
0	91	50	84
10	86	60	91
20	80	70	97
30	73	80	103
34	70 E	90	108
40	76	100	114

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Picric acid
($C_6H_3O_7N_3$)

Hrynakowski and Kapuzinski, 1934

%	f. t.	E	min.
0.0	91.0	-	-
5.0	90.9	-	-
10.0	88.2	-	-
15.0	86.6	-	-
20.0	84.0	-	-
25.0	81.0	59	3
30.0	77.2	62	6
35.0	72.4	62.2	5
40.0	66.8	62.2	7
45.0	64.0	62.1	10
47.5	62.2	62.2	11
50.0	66.8	62.2	10
55.0	76.2	62.1	8
60.0	85.0	62.0	6
65.0	90.6	62.0	4
70.0	96.2	62.0	4
75.0	103.0	-	-
80.0	104.6	-	-
85.0	112.2	-	-
90.0	116.0	-	-
95.0	119.0	-	-
100.0	122.5	-	-

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Trinitroresol sym.
($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E	%	f. t.	E
100	101.4	-	45	63.2	55.2
95	96.9	45.1	40	66.5	55.1
90	92.7	48.6	35	70.0	54.8
85	88.0	52.3	30	73.3	54.7
80	82.5	53.5	25	76.5	53.1
75	77.2	53.9	20	79.7	52.5
70	71.8	54.1	15	83.0	52.5
65	66.3	55.3	10	85.5	51.6
60	60.9	55.4	5	88.3	48.5
55	56.2	55.4	0	90.1	-
50	59.2	55.4			

m-Dinitrobenzene ($C_6H_4O_4N_2$) + β -Naphthol
($C_{10}H_8O$)

Giua and Marcellino, 1920

%	f. t.	E	%	f. t.	E
94.0	124.0	-	43.60	67.0	-
89.46	112.7	-	41.75	61.6	-
82.08	107.5	-	37.62	60.4	56.1
75.54	102.5	-	33.77	58.5	"
70.05	97.0	-	29.07	57.2	"
62.04	90.2	-	29.65	56.5	"
59.01	85.0	-	25.61	58.3	-
53.07	76.0	-	20.40	65.5	-
50.20	69.2	61.3	8.39	78.0	-
47.55	64.5	61.6	0	88.9	-
44.29	62.1	-			
(1+1)					

p-Dinitrobenzene ($C_6H_4O_4N_2$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0.0	171	-	54.1	126.5	91
13.3	164.5	-	63.3	113	-
25.5	153.5	-	77.6	95	91
34.9	148	91	89.3	95	-
40.5	142	91	100.0	105	-

Trinitrobenzene sym. ($C_6H_3O_6N_3$) + Hydroquinone
($C_6H_6O_2$)

Sudborough and Beard, 1911

%	f. t.	%	f. t.
100	169.5	50	131.5 (1+1)
90	164	40	128
80	157	30	117
70	147.5	21.5	101.5 E
60	134	10	113
57	129 E	0	121.5

Trinitrobenzene sym. ($C_6H_3O_6N_3$) + Tribromphenol sym. ($C_6H_3OBr_3$)

Sudborough and Beard, 1911

mol%	f. t.	mol%	f. t.
100	92.5	40	92
90	85	30	99
80	81	20	106
65	76 E	10	113.5
50	85	0	121.5

Trinitrobenzene s. ($C_6H_3O_6N_3$) + Picric acid ($C_6H_3O_7N_3$)

Kofler, 1940

%	f. t.
0	123.5
-	114 E
100	122

Kofler and Brandstätter, 1948

% f. t.		% f. t.	
I	II	I	II
100	122	75	30
90	121	80	20
80	121	85	10
70	120	90	5
60	120	94	1
50	119	99	0
40	118.5	104	

Trinitrobenzene s. ($C_6H_3O_6N_3$) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov, 1916

wt%	mol%	f. t.	E	min.
100	100	175.5	-	-
95.0	94.29	169.0	-	-
90.0	88.67	162.2	73.5	25
85.0	83.17	156.1	78.4	36
80.0	77.67	149.4	79.4	50
70.0	66.98	135.8	82.4	72
60.0	56.60	122.2	82.0	100
50.0	46.51	106.2	83.2	160
40.0	36.69	89.6	93.2	320
35.0	31.92	83.9	-	380
30.0	27.15	89.3	83.2	310
20.0	17.90	99.8	82.4	130
10.0	8.81	111.6	80.0	40
5.0	4.29	117.4	-	-
2.5	2.18	119.5	-	-
0.0	0.0	121.4	-	-

1,3,4,5-Tetranitrobenzene ($C_6H_2O_8N_4$) + Picric acid ($C_6H_3O_7N_3$)

Holleman, 1930

%	f. t.	m. t.
10	122	110
20	113	98
30	105	95
0	130	129

o-Nitrotoluene ($C_7H_7O_2N$) + Methyl salicylate ($C_8H_8O_3$)

Lecat, 1949

%	b. t.	Dt mix.
0	221.75	-
14	221.55 Az	-
53	-	-0.1
100	222.95	-

o-Nitrotoluene ($C_7H_7O_2N$) + p-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.
0	221.75
43	223.15 Az
100	219.75

m-Nitrotoluene ($C_7H_7O_2N$) + o-Nitrophenol ($C_6H_5O_2N$)

Crockford and Simmons jr., 1933

E : 32.0 mol% -1.5°

p-Nitrotoluene ($C_7H_7O_2N$) + Pyrocatechol ($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	238.9
11	238.7 Az
100	245.9

p-Nitrotoluene ($C_7H_7O_2N$) + Carvacrol ($C_{10}H_{14}O$)

Lecat, 1949

%	b.t.
0	238.9
75	237.7 Az
100	237.85

p-Nitrotoluene ($C_7H_7O_2N$) + o-Nitrophenol
($C_6H_5O_2N$)

Crockford and Simmons jr., 1933

E : 52.5 mol % 16.9°

p-Nitrotoluene ($C_7H_7O_2N$) + Picric acid
($C_6H_3O_7N_3$)

Pushin and Kozuhar, 1947

mol%	f.t.	E	mol%	f.t.	E
100	122	-	40	79	46
90	118	-	30	64	45
80	113.5	42	20	-	46
70	107.5	43.5	10	51	-
60	99.5	43	0	57	-
50	90	44.5			

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f.t.	E	%	f.t.	E
0.0	70.5	-	52.4	78	-
12.0	62.5	55	64.2	85	55
25.0	57	-	71.2	89	-
29.9	60	-	82.3	95	-
40.4	70	55	93.8	101.5	-
44.6	73	-	100.0	105	-

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + m-Aminophenol
(C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f.t.	E	%	f.t.	E
100	118.0	-	30.8	92.5	65.0
96.5	116.5	-	26.2	88.5	-
86.7	114.0	-	22.7	85.0	-
78.8	111.5	-	20.3	83.5	-
68.3	107.8	-	17.1	79.0	-
62.7	105.5	-	13.9	73.0	65.0
54.9	103.0	-	9.9	65.0	-
49.3	101.0	-	7.4	66.5	-
45.7	99.5	65.0	3.4	68.5	-
39.1	97.0	-	0.0	71.0	-
34.9	95.0	-			

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Brandstätter, 1947

%	f.t.	%	f.t.
0	71	50	83
10	66	60	91
20	61	70	98
26	56 E	80	104
30	64	90	109
40	74	100	114

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + Picric acid
($C_6H_3O_7N_3$)

Wogring and Vari, 1919

%	f.t.	E	min.
100	119.1	-	-
90	110.0	48.4	13
80	99.5	49.5	22
70	89.3	50.8	34.5
60	76.3	51.5	49.0
50	57.5	50	60.0
40	-	51.7	71.0
30	52.3	51.5	66.0
20	59.1	50.1	35.0
10	65.3	57.8	10.0
0	68.8	-	-

Hrynakowski and Kapuzinski, 1934

%	f.t.	E	min.
0	71.0	-	-
5.0	69.0	-	-
10.0	67.2	-	-
15.0	63.5	52.6	3
20.0	62.0	53.4	5
25.0	58.5	53.6	8
30.0	55.2	54.0	9
33.4	54.0	54.0	10.5
35.0	54.0	53.8	10.5
37.0	58.2	54.0	10
40.0	62.0	54.0	9
45.0	66.4	53.7	7.5
50.0	74.0	53.5	7
55.0	79.2	53.5	5
60.0	84.0	53.4	3.5
65.0	89.6	53.0	4.5
70.0	93.5	53.2	2.3
75.0	98.2	52.2	2.5
80.0	104.0	"	-
85.0	108.0	"	-
90.0	113.0	"	-
95.0	117.0	"	-
100.0	122.5	"	-

2,4-Dinitrotoluene ($C_7H_5O_4N_2$) + β -Naphthol
($C_{10}H_8O$)

Giua and Marcellino, 1920

%	f.t.	E	%	f.t.	E
100	122.0	-	44.28	74.6	-
76.86	103.0	-	40.97	74.8	-
70.29	97.5	-	37.33	73.1	-
65.40	92.0	-	33.49	72.3	-
61.23	86.7	-	28.99	69.7	-
57.37	81.5	-	26.36	67.8	-
54.00	76.4	74.3	21.75	63.9	58.9
51.70	74.4	-	15.97	59.3	-
49.74	74.5	-	7.77	63.2	-
49.13	74.3	-	0	69.3	-
47.70	74.5	-			

(1+1)

Trinitrotoluene sym. ($C_7H_5O_6N_3$)
+ m-Oxybenzaldehyde ($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f.t.	E	%	f.t.	E
0.0	81.0	-	47.1	79.5	-
9.2	73.8	-	54.9	83.7	-
16.0	68.8	-	67.3	89.5	65.5
25.9	68.5	65.5	77.7	94.6	-
33.9	73	65.5	91.5	101.5	-
38.2	75	65.5	100.0	105	-

Trinitrotoluene sym. ($C_7H_5O_6N_3$)
+ 2,4-Dinitrophenol ($C_6H_4O_5N_2$)

Campbell and Pritchard, 1947

%	f.t.	E	%	f.t.	E
0	80.1	-	60.0	91.4	-
10.0	74.2	-	70.0	97.4	-
20.0	67.7	62.4	80.0	102.6	-
30.0	64.0	62.7	90.0	107.0	-
40.0	73.7	62.7	100.0	111.2	-
50.0	84.3	-			

E : 28% 72.8°

t spontaneous velocity of crystalliza-
crystallization tion (mm/min.)

60	0.13
50	0.77
40	1.76
30	1.8

d= 1.47 η = 12960Trinitrotoluene sym. ($C_7H_5O_6N_3$) + Picric acid
($C_6H_3O_7N_3$)

Giua, 1916

%	f.t.	E	%	f.t.	E
0	80.6	-	45.95	69	56
5.53	76.9	-	52.62	77	55.3
12.38	72.7	-	63.12	86.1	-
20.37	66.2	-	68.69	90.2	-
26.97	60	56	74.34	99.5	-
35.31	57.5	55.4	89.90	111.2	-
41.91	67.5	55.4	100	121.7	-
45.56	71.7	55.3			

Taylor and Rinknbach, 1923

%	f.t.	E	%	f.t.	E
0.0	80.27	-	40.09	66.3	-
10.45	74.35	-	50.08	78.85	-
19.99	68.4	-	60.09	89.5	-
25.24	65.35	59.8	80.03	106.7	-
30.20	-	59.4	100	121.8	-
33.70	-	59.8			

Rinknbach and Hall, 1924

%	f.t.	E	%	f.t.	E
85		110.7			
90		114.6			
95		118.4			
100		121.9			

Hrynakowski and Kapuzinski, 1934

%	f.t.	E	min.
0	82.0	-	-
5	79.0	-	-
10	76.0	-	-
15	73.2	-	-
20	69.0	58.2	6
25	65.8	58.5	8
30	60.8	59.0	11
31	60.5	"	12
32	59.0	"	"
35	61.2	"	"
40	68.7	"	10
45	74.2	58.8	6
50	80.6	58.6	7
55	86.0	58.7	6.5
60	90.4	58.0	4
65	96.0	57.8	3
70	101.0	-	-
75	104.2	-	-
80	107.8	-	-
85	111.0	-	-
90	116.0	-	-
95	119.0	-	-
100	122.5	-	-

Moore, Burkardt and Mc Ewan, 1956 (fig.)

%	d	%	d
0°			
0	1.5450	60	1.6400
20	.5744	80	.6732
40	.6059	100	.7070
t	η	t	η
0 mol%		20 mol%	
90	10330	100	9120
80	13490	90	12590
		80	17380
		70	25120
		60	38910
40 mol%		60 mol%	
110	8920	120	8510
100	9770	110	12030
90	16950	100	16600
80	24000	90	23450
70	37180	80	34670
80 mol%		100 mol%	
130	8320	130	11750
120	12050	120	15850
110	15850	110	21870
100	22390		

Trinitrotoluene sym. ($C_7H_5O_6N_3$) + 2,4,6-Trinitro-m-cresol ($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f.t.	E	%	f.t.	E
100	101.4	-	45	48.0	41.3
95	96.6	33.4	40	52.3	41.0
90	90.3	36.3	35	55.2	40.6
85	83.0	38.5	30	58.5	39.8
80	70.5	40.2	25	61.6	38.2
75	67.5	40.8	20	65.6	37.5
70	60.0	41.2	15	69.0	36.4
65	57.8	41.3	10	72.6	34.5
60	46.5	41.3	5	76.4	-
55	42.6	41.3	0	78.8	-
50	45.4	41.4			

Trinitrotoluene sym. ($C_7H_5O_6N_3$) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov, 1916

wt%	mol%	f.t.	E	min.
100	100	175.5	-	-
95.0	94.62	168.8	-	-
90.0	89.29	160.9	58.8	36
85.0	84.02	155.1	61.3	50
80.0	78.75	148.3	62.0	70
70.0	68.38	139.9	66.0	110
60.0	58.16	130.0	66.8	130
50.0	48.09	116.8	67.2	160
40.0	38.18	103.1	67.6	210
30.0	28.42	87.7	67.6	290
25.0	23.65	78.1	67.7	320
20.0	18.89	68.4	-	370
15.0	14.11	70.7	66.1	250
10.0	9.34	74.2	61.3	160
5.0	4.56	75.6	-	-
2.5	2.32	77.9	-	-
0.0	0	78.8	-	-

Trinitrotoluene sym. ($C_7H_5O_6N_3$) + β -Naphthol ($C_{10}H_8O$)

Giua and Marcellino, 1920

%	f.t.	E	%	f.t.	E
100	122.0	-	47.64	107.5	-
87.40	113.8	-	43.59	108.8	-
80.73	109.7	-	39.82	109.4	-
76.45	107.4	-	34.64	108.8	-
70.21	102.5	-	30.63	107.4	-
67.63	100.0	-	26.20	105.0	-
62.76	97.7	98.0	21.56	100.0	-
60.07	99.5	97.5	16.57	93.0	73.5
57.20	102.0	98.0	11.91	83.5	73.5
51.10	105.8	-	6.15	75.5	-
50.53	105.5	-	0	79.6	-
(1+2)					

Trinitroxylyene sym. ($C_8H_7O_6N_3$) + Picric acid ($C_6H_3O_7N_3$)

Efremov and Tikhomirova, 1928

%	f.t.
0	180.2
78.3	105.5 E
100	122.4

Trinitroxylene sym. ($C_8H_7O_6N_3$) + Trinitrocresol sym. ($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1928

%	f.t.
0	180.2
82.8	84.6 E
100	101.2

Trinitroxylene sym. ($C_8H_7O_6N_3$) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov, 1916

wt%	mol%	f.t.	E	min.
100	100	175.5	-	-
95.0	94.92	170.7	137.7	-
90.0	89.85	165.4	139.4	36
85.0	84.79	161.3	141.0	54
80.0	79.74	156.2	141.0	72
70.0	69.66	148.0	141.3	210
65.0	64.63	143.6	142.0	310
60.0	59.61	142.7	-	380
55.0	54.60	146.5	141.2	360
50.0	49.59	149.8	141.0	290
40.0	39.61	156.2	141.0	180
30.0	29.66	162.6	139.4	72
20.0	19.74	169.0	135.4	40
10.0	9.86	174.6	134.6	15
5.0	4.92	177.8	-	-
2.5	2.46	178.9	-	-
0	0	180.2	-	-

Efremov and Tikhomirova, 1928

%	f.t.
0	180.2
62.5	141.3 E
100	175.5

o-Nitrobenzaldehyde ($C_7H_5O_3N$) + β -Naphthol ($C_{10}H_8O$)

Dischendorfer and Nesitka, 1928

%	f.t.	%	f.t.
0	44.5	39.0	60.0
9.2	39.5	47.8	73.0
19.5	34.5	59.7	87.5
23.7	33.0	77.7	106.5
27.6	40.0	100.0	122.0

m-Nitrobenzaldehyde ($C_7H_5O_3N$) + Phenol (C_6H_6O)

Schmidlin and Lang, 1912 and Lang, 1912 (fig.)

%	f.t.	%	f.t.
100	41	50.0	-10
95.0	38.6	48.2	-14 E
90.0	36	43.5	+1.6
85.0	32.9	37.9	14.9
80.0	29.4	32.7	23.6
75.0	24.3	23.4	33.7
70.0	19.8	15.4	41.7
65.0	13.6	9.7	46.8
60.0	+6.7	4.5	51
55.0	-0.8	0	55.5

m-Nitrobenzaldehyde ($C_7H_5O_3N$) + β -Naphthol ($C_{10}H_8O$)

Dischendorfer, 1928

mol%	f.t.	mol%	f.t.
0	58	46.0	61.5
9.0	52.5	48.8	61.5
15.4	49	51.7	71.5
18.4	48	56.7	79.5
23.9	53	65.0	89.5
33.5	58	73.7	99.5
41.0	60.5	100	122
E : 17.5 mol% 48° 49 mol% 62% (1+1)			

p-Nitrobenzaldehyde ($C_7H_5O_3N$) + Pyrocatechol ($C_6H_6O_2$)

Osipenko and Tishchenko, 1941

mol%	f.t.	mol%	f.t.
0	106	57.85	80.5
13.15	96	67.3	77.5
25.55	84.5	25.94	83
34	79	84.52	92
43.6	81	92.5	97.5
50.0	83.5 (1+1)	100	105

p-Nitrobenzaldehyde ($C_7H_5O_3N$) + β -Naphthol ($C_{10}H_8O$)

Dischendorfer and Nesitka, 1928

%	f.t.	%	f.t.
0	106	53.9	76
24.8	88.5	55.0	75.5
33.5	80.5	56.6	81
39.8	75.5	59.3	84.5
42.0	75	67.1	91.5
45.5	76.5	74.4	99.5
48.8	76.5	100	122
50.2	76.5	(1+1)	

o-Nitraniline ($C_6H_5O_2N_2$) + Phenol (C_6H_6O)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0.0	68.0	54.9	11.0
10.8	58.0	59.9	13.0
13.7	51.0	64.8	17.0
24.3	46.5	71.5	22.5
30.7	40.0	77.7	28.0
37.9	33.5	85.1	32.0
43.1	28.0	92.2	36.0
48.5	18.8	97.6	39.0
49.7	18.3	100.0	40.5

o-Nitraniline ($C_6H_5O_2N_2$) + Styphnic acid
($C_6H_5O_3N_3$)

Efremov, 1927

wt%	mol%	f.t.	E
100	100	175.5	-
95	91.46	168.3	34.2
90	85.90	160.8	35.3
85	78.89	152.8	39.7
80	71.90	143.7	40.6
75	63.77	134.1	45.0
70	55.84	122.8	45.3
67	53.36	117.0	45.0
63.97	50	110.1	45.8
60	45.83	101.3	45.6
55	40.93	90.2	45.6
50	36.03	77.9	45.6
45	31.16	66.5	45.5
40	27.30	54.3	45.6
35	23.37	46.1	-
30	19.45	49.7	45.6
25	15.67	53.7	45.5
20	11.90	57.2	45.2
15	8.90	61.0	45.0
10	5.90	64.3	43.3
5	2.91	67.0	39.5
0	0	69.4	-

E : 64.2 wt% 45.6°

m-Nitraniline ($C_6H_5N_2O_2$) + Phenol (C_6H_6O)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0.0	111.0	52.1	67.2
4.3	108.5	52.4	66.5
8.4	105.3	55.6	63.5
15.2	100.0	58.5	59.3
20.8	96.0	62.5	55.0
26.6	91.3	65.8	49.8
32.4	86.0	70.5	41.0
37.8	81.0	78.4	28.8
42.2	77.5	86.2	33.0
47.4	82.4	96.0	38.5
49.5	69.8	100.0	40.5

m-Nitraniline ($C_6H_5O_2N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavecki and Rikovski, 1948

mol%	f.t.	E	mol%	f.t.	E
100	108	-	40	90	73
90	100	68	30	96	71
80	92	69	20	103	68
70	83	70	10	108	65
60	73	73	0	112	-
50	81	73			

m-Nitraniline ($C_6H_5O_2N_2$) + Styphnic acid
($C_6H_5O_3N_3$)

Efremov, 1927

wt%	mol%	f.t.	E	tr.t.
100	100	175.5	-	-
97	94.80	170.3	-	-
95	91.46	166.3	138.8	-
90	85.90	156.8	140.1	-
85	78.89	146.4	140.2	-
80	71.90	143.9	140.2	-
75	63.77	149.3	139.4	-
70	55.84	153.5	138.9	-
67	53.36	155.1	-	-
65	50.84	155.9	-	-
63.97	50	156.2	-	-
60	45.83	154.3	-	99.4
55	40.93	149.7	-	102.6
50	36.03	141.9	-	104.7
47.03	33.33	135.7	-	106.8
45	31.16	130.4	-	106.7
40	27.30	118.0	-	105.6
37.23	27.30	109.8	-	105.6
35	23.37	105.2	97.2	-
32.5	21.41	104.0	98.5	-
30	10.45	103.1	98.6	-
25	15.67	99.7	98.5	-
22.5	13.78	98.8	-	-
20	11.90	100.6	98.5	-
15	8.90	104.0	98.0	-
10	5.90	107.3	98.0	-
5	2.91	110.9	93.3	-
2.5	1.45	112.3	-	-
0.0	0.0	113.8	-	-

E₁ : 17.7 wt% 140.8°E₂ : 76.4 wt% 98.6°

(1+1) 156.2°

tr.t. : 65.6 wt% 105.2°

p-Nitraniline ($C_6H_6O_2N_2$) + Phenol (C_6H_6O)

Kremann and Rodinis, 1906

%	f.t.	%	f.t.
0.0	147.5	57.9	81.8
9.4	139.0	63.5	72.0
21.1	126.5	68.6	66.9
30.6	115.8	73.7	55.8
38.8	108.5	76.9	49.5
43.3	103.5	81.8	38.5
51.0	93.0	87.9	34.0
51.9	91.5	94.3	37.0
56.5	85.0	100.0	40.5

p-Nitraniline ($C_6H_6O_2N_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavecki and Rikovski, 1948

mol%	f.t.	E	mol%	f.t.	E
100	108	-	40	115	80
90	103	80	30	126	77
80	94	83	20	135	-
70	85	85	10	142	75
60	85	85	0	148	-
50	105	85			

p-Nitraniline ($C_6H_6O_2N_2$) + Styphnic acid
($C_6H_5O_3N_3$)

Efremov, 1927

wt%	mol%	f.t.	E	min.
100	100	175.5	-	-
95	91.46	167.3	118.5	40
90	85.90	159.8	119.9	100
85	78.89	151.1	123.8	200
80	71.90	141.8	124.5	280
75	63.77	132.2	124.7	380
70	55.84	128.5	124.7	300
67	53.36	129.4	120.2	140
63.97	50	129.8	-	(1+1) -
60	45.81	128.5	106.5	60
55	40.93	125.9	109.8	140
50	36.03	122.6	112.0	260
45	31.16	118.4	112.1	380
40	27.30	114.4	112.2	500
35	23.37	114.8	112.2	500
30	19.45	119.9	112.2	420
25	15.67	124.5	112.2	340
20	11.90	129.4	112.0	260
15	8.90	134.3	110.6	180
10	5.90	138.7	108.5	120
5	2.91	143.6	106.6	40
0	0	147.0	-	-

p-Nitraniline ($C_6H_6O_2N_2$) + p-Nitrophenol
($C_6H_5O_3N$)

Grimm, Günther and Tittus, 1931 (fig.)

mol%	f.t.	E	mol%	f.t.	E
100	113	-	50	106	89
90	107.5	89	40	115	"
80	100	"	30	124	"
70	92	"	20	131.5	"
65	89	"	10	140	"
60	95	"	0	148	"

2,4-Dinitraniline ($C_6H_5O_4N_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Brandstätter, 1947 (fig.)

%	f.t.	%	f.t.
100	114	50	139
90	110	40	148
80	106	30	157
78	105 E	20	165
70	117	10	172
60	128	0	179

Tetryl ($C_7H_5O_8N_5$) + o-Nitrophenol ($C_6H_5O_3N$)

Efremov and Tikhomirova, 1926

mol%	f.t.
0	126.8
87.8	40.2 E
100	44.9

Tetryl ($C_7H_5O_8N_5$) + p-Nitrophenol ($C_6H_5O_3N$)

Efremov and Tikhomirova, 1926

mol%	f.t.
0	126.8
50.6	80.6 E
100	113.8

Tetryl ($C_7H_5O_8N_5$) + Picric acid ($C_6H_3O_7N_3$)

Taylor and Rinkenbach, 1923

mol%	f. t.	E	mol%	f. t.	E
100	121.8	-	42	77.3	85.5
85	111.75	-	40	81.0	-
70	99.9	-	38	84.2	84.6
60	90.0	-	35	90.1	-
55	84.8	85.6	30	98.3	-
52.5	81.05	-	22.86	108.9	-
50	76.65	85.5	11.88	120.2	-
47.5	72.2	85.5	10	121.75	-
45	-	85.5	0	128.72	-

(1+1)

Rinkenbach and Taylor, 1924

%	f. t.	%	f. t.
100	121.9	15	117.50
90	115.2	10	121.60
80	108.2	5	125.30
60	90.0	0	128.72

Efremov and Tikhomirova, 1926

mol%	f. t.
0	126.8
43	76 E
100	122.4

Tetryl ($C_7H_5O_8N_5$) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov and Tikhomirova, 1926

mol%	f. t.
0	126.8
25.5	83 E
100	175.5

Tetryl ($C_7H_5O_8N_5$) + 2,4,6-Trinitrocresol ($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1926 and 1927

%	f. t.	E	%	f. t.	E
100	101.2	-	45	81.7	64.0
95	96.2	-	40	87.0	63.0
90	92.4	58.1	35	92.0	62.7
85	88.5	62.2	30	98.2	62.5
80	84.6	63.8	25	102.8	61.5
75	79.5	64.0	20	107.5	60.3
70	75.9	64.2	15	112.3	60.1
65	71.9	64.4	10	117.1	58.5
60	66.7	64.4	5	122.3	51.1
55	68.3	64.4	0	126.8	-
50	74.2	64.2	E (corrected) : 56.7 % 64.4		

Nitrosodimethylaniline ($C_8H_{10}ON_2$) + Phenol (C_6H_6O)

Kremann, 1904

%	f. t.	%	f. t.
0	86.0	49.0	78.0
3.5	82.0	51.7	75.0
7.0	77.0	59.5	58.0
9.5	79.0	64.3	44.0
14.5	86.0	67.6	24.0
18.1	89.0	80.3	24.5
20.8	90.0	84.2	29.0
24.0	90.5	89.4	34.5
25.3	91.0	92.2	36.7
26.3	91.0	95.5	38.7
31.4	90.0	97.7	40.0
34.0	89.0	98.8	40.5
41.0	86.5	100	41.5
42.1	85.0	(2+1)	

Bernouilli and Veillon, 1932

%	f. t.	%	f. t.
100	40.9	40	88.1
90	35.6	30	89.1
80	26.7	20	87.0
70	11.2	10	80.2
60	53.2	0	86.2
50	78.0		

%	d	110°	97.5°	77.5°
0	0.9964	1.0073	1.0260	-
"	-	.0128	-	-
10	1.0046	.0180	1.0345	-
"	-	.0279	.0412	-
20	1.0138	.0300	.0462	-
"	.0190	.0350	.0521	-
30	.0247	.0410	.0595	-
"	.0271	.0418	.0613	-
40	.0300	.0441	.0640	-
"	.0338	.0454	.0652	-
50	.0375	.0488	-	-
60	.0454	.0560	-	-
70	.0532	.0651	-	-
"	-	.0695	-	-
80	1.0628	.0754	-	-
"	.0674	.0792	-	-
90	.0720	.0845	1.0975	-
100	.0864	.1047	-	-

%	97.5°	η	77.0°	%	97.5°	η	77.0°
100	771.4	1130.1	50	1081.5	1792.6		
90	805.1	1193.4	40	1193.3	-		
85	826.0	-	30	1360.8	-		
80	852.2	1293.6	25	1450.0	-		
75	874.2	1354.1	20	1568.6	-		
70	905.6	1418.7	15	1697.1	-		
65	938.1	-	10	1827.6	2916.5		
60	984.6	1575.6	0	2104.0	-		

Picramide (C ₆ H ₄ O ₆ N ₄) + Dinitrophenol (C ₆ H ₄ O ₅ N ₂)				Diethylammonium picrate (C ₁₀ H ₁₄ O ₇ N ₃) + Picric acid (C ₆ H ₃ O ₇ N ₃)			
Campbell, Pritchard and al., 1947				Walden and Birr, 1932			
%	f.t.	m.t.	E	t	d	κ	η
100	110.9	-	-	50 mol%			
90	106.2	106.0	100.5	75	1.4682	9.931	-
80	101.5	100.8	100.0	100	.4468	26.94	39000
75	104.5	-	99	125	.4259	53.28	17950
70	113.3	103.9	100.5	25 mol%			
60	129.5	128.3	100.4	75	1.4017	13.04	137900
50	146.8	143.0	100.6	100	.3618	35.28	43660
40	153.0	-	-	125	.3598	69.50	20200
30	163.0	-	-	0 mol%			
20	173.0	-	-	75	1.3300	-	82000
10	180.5	-	-	100	.3111	-	32030
0	186.5	-	-	120	.2962	-	18310
E : (77.5%) d ¹¹⁰ ₂₀ = 1.478				130	.2890	-	14450
t	η			150	.2747	-	9528
110	5960			Tetraisoamylammonium picrate (C ₂₆ H ₄₆ O ₇ N ₄) + Picric acid (C ₆ H ₃ O ₇ N ₃)			
106	6390			Walden and Birr, 1932			
100	7530			t	d	κ	η
95	8440			50 mol%			
91	11160			75	1.2019	4.366	229300
				100	.1834	15.99	59070
				125	.1644	34.18	23730
				75 mol%			
				75	1.495	4.311	290200
				100	.1039	14.32	73210
				125	.0890	32.50	29630
				100 mol%			
				90	1.0493	-	130400
				100	.0429	-	81210
				120	.0306	-	37690
				130	.0244	-	27050
				150	.0125	-	15170
				o-Nitrophenyl acetate (C ₈ H ₇ O ₄ N) + o-Nitrophenol (C ₆ H ₅ O ₃ N)			
				Boeseke, 1912			
Campbell, Pritchard and al., 1947				mol%	f.t.	mol%	f.t.
%	f.t.	E	%	f.t.	E		
90	117.0	-	75	124.5	113.0	100	44.5
86	115.0	-	60	146.0	-	94.3	42.5
85	114.0	112.5-113	30	168.5	-	88.6	40.8
84	114.5	"	0	186.5	-	81.5	38.4
80	121.0	113				72.6	35.1
E : 84.5% 113°						65.9	32.4
						57.6	29.3
						50.7	25.2
						43.1	20.1

o-Chlornitrobenzene ($C_6H_4O_2NC1$) + Pyrocatechol
($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	246.0
49	243.5 Az
100	245.9

m-Chlornitrobenzene ($C_6H_4O_2NC1$) + Carvacrol
($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	235.5
5	235.4 Az
100	237.85

p-Chlornitrobenzene ($C_6H_4O_2NC1$) + Pyrocatechol
($C_6H_6O_2$)

Lecat, 1949

%	b. t.
0	239.1
17.5	236.6 Az
100	245.9

p-Chlornitrobenzene ($C_6H_4O_2NC1$) + Carvacrol
($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	239.1
78	237.4 Az
100	237.85

p-Chlornitrobenzene ($C_6H_4O_2NC1$) + p-Nitrophenol
($C_6H_5O_3N$)

Grimm, Günther and Tittus, 1931 (fig.)

mol%	f. t.	E	mol%	f. t.	E
0	112	-	60	66	61.5
10	104	60	66.5	61.5	"
20	96.5	"	70	64	"
30	89.5	"	80	71	"
40	82	"	90	78	60.5
50	74	60.5	100	83	-

Chlor-2,4-dinitrobenzene ($C_6H_3O_4N_2Cl$) + 2,4-Di-
nitrophenol ($C_6H_3O_5N_2$)

Brandstätter, 1947

%	f. t.	%	f. t.
0	51	50	83
10	46	60	92
15	43	70	99
20	45	80	104
30	58	90	109
40	72	100	114
		E : 17	40

Picric chloride ($C_6H_2O_6N_3Cl$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

%	mol%	f. t.	E	min.
0	0	81.2	-	-
3	3.26	79.3	77.2	-
5	5.31	78.1	75.0	- mixed
10	10.73	74.5	70.3	- crystals.
20	21.27	67.1	61.0	-
25	26.47	62.7	-	-
30	31.66	58.6	56.1	390
35	36.77	66.0	57.5	500
40	41.87	74.6	57.3	430
45	46.91	81.6	56.6	390
50	51.94	88.0	"	360
60	61.85	96.7	54.2	280
65	66.72	100.6	53.8	210
70	71.59	103.6	50.7	160
80	81.21	109.6	49.4	90
85	85.94	113.0	-	-
90	90.66	115.6	-	-
95	95.36	118.6	-	-
97.5	97.68	120.4	-	-
100	100	122.4	-	-

Grimm, Günther and Tittus, 1931

mol%	f. t.	E	mol%	f. t.	E
100	122	120	40	73	59
90	119	81	31	59	"
80	115	73.5	30	60	"
70	108	67.5	20	75	62
60	100	63	10	81	70.5
50	87	60	0	85	85

Kofler and Brandstätter, 1948					
%	f.t.(picryl chloride)		f.t.(picric acid)		
	I	II	I	II	
0	83	61	-	-	
10	78	58	-	-	
18	73	56 E	-	56	
20	72	55	-	59	
22	70	53 E	53	62	
26	67	-	63	67	
28	65	-	65	70	
30	-	-	67	72	
37	-	-	78	78	
40	-	-	82	81	
50	-	-	91	-	
60	-	-	98	-	
70	-	-	105	-	
80	-	-	112	-	
90	-	-	117	-	
100	-	-	122	-	
(1+1)					
1-Nitronaphthalene (C ₁₀ H ₇ O ₂ N) + Resorcinol					
Senden, 1923 (C ₆ H ₆ O ₂)					
%	f.t.	%	f.t.	%	f.t.
100	109.5	51.1	90	10.01	49.5
92.233	107.1	49.5	88.9	9.313	50.4
83	103.2	46.5	87.4	8.169	50.6
80.865	102.2	40.76	84	5.954	50.6
70.06	97.6	33.306	79.5	4.971	53
61.15	94.4	26.6	73	3.296	53.5
55.428	92.3	15.106	58.8	0.925	54.4
52.96	90.7	10.933	50.4	0	55.8
1-Nitronaphthalene (C ₁₀ H ₇ O ₂ N) + Pyrocatechol					
Senden, 1923 (C ₆ H ₆ O ₂)					
%	f.t.	%	f.t.	%	f.t.
100	103.5	49.051	80.3	16.93	44.8
88.045	98.4	41.15	74.2	13.98	46.7
79.44	95	29.94	63.2	8.09	50.9
70.19	91.2	19.349	48.5	0	55.8
59.225	86.5	18.12	45.6		
1-Nitronaphthalene (C ₁₀ H ₇ O ₂ N) + Hydroquinone					
Senden, 1923 (C ₆ H ₆ O ₂)					
%	f.t.	%	f.t.	%	f.t.
100	170.5	47.502	149.5	5.081	102
89.929	167.1	41.502	149.5	3.634	88
79.874	163.5	31.708	144.8	2.806	74.5
62.209	161.5	23.41	138.4	0.991	54.3
61.09	156.9	21.145	136.8	0	55.8
51.749	153.5	15.569	130.5		
1-Nitronaphthalene (C ₁₀ H ₇ O ₂ N) + Picric acid					
Efremov, 1915 and 1918 (C ₆ H ₃ O ₇ N ₃)					
%	mol%	f.t.	E		
100	100	122.4	-		
97	96.07	117.3	-		
95	93.49	114.7	-		
90	87.18	108.2	47.7		
80	75.14	95.0	49.3		
75	69.39	87.1	50.1		
70	63.80	78.5	50.4		
65	58.46	70.6	52.6		
60	53.12	63.3	54.5		
57.5	50.55	60.0	54.7		
56.43	50.00	58.3	-		
52.5	45.51	54.7	34.9		
50	43.57	53.8	35.7		
45	38.53	52.4	-		
40	33.50	50.9	35.6		
35	28.98	48.8	35.5		
30	24.46	46.5	35.6		
25	20.12	43.0	35.1		
20	15.89	38.5	33.9		
15	11.82	45.1	35.4		
10	7.75	46.2	35.1		
5	3.82	52.0	-		
2.5	1.94	54.3	-		
0	0	56.5	-		
(1+1)					
Jovinet, 1928					
%	f.t.	%	f.t.		
100	121.25	40	67.8		
90	111.5	30	62.9		
80	101.4	23	57.8		
70	90.2	18	52.6		
60	77.0	16	50.0		
57	72.4(1+1)	15	50.4		
55	70.8	10	52.5		
50	70.2	5	54.5		
		0	56.4		
Pushin and Kozuhar, 1947					
mol%	f.t.	E			
100	122	-			
90	117	52			
85	112	55			
80	109	56			
75	104	58			
70	99	61			
65	94	65			
60	88.5	65			
55	81	66			
50	67	67 (1+1)			
45	66.5	-			
40	66	42			
35	65	43			
25	60	46			
20	55	48			
15	49	49 E			
10	52	-			
5	57	-			
0	61	-			

1-Nitronaphthalene ($C_{10}H_7O_2N$) + Styphnic acid
($C_6H_5O_8N_3$)

Efremov, 1916

wt%	mol%	f. t.	E	min.
100.0	100.0	175.5	-	-
95.0	93.07	170.1	-	-
90.0	86.41	164.4	44.2	9
85.0	80.13	157.2	45.0	48
80.0	73.86	148.3	45.2	60
70.0	62.23	135.1	46.0	110
65.0	56.74	126.6	45.2	130
58.21	50.0	113.2	45.2	160
50.0	41.39	99.2	45.2	190
40.0	32.01	82.9	45.0	260
35.0	27.55	76.3	45.2	300
30.0	23.24	66.9	45.0	360
25.0	19.12	61.1	45.2	420
20.0	14.0	52.8	45.2	500
15.0	11.14	46.0	-	600
10.0	7.28	47.9	44.6	210
5.0	3.59	52.3	-	-
0.0	0.0	56.5	-	-

1,5-Dinitronaphthalene ($C_{10}H_6O_4N_2$) + Picric acid
($C_6H_3O_7N_3$)

Urbanski and Kwiatkowski, 1934

%	f. t.	E	%	f. t.	E
0	215.8	-	60	166.2	113.0
10	209.8	97.7	70	153.0	113.0
15	205.6	98.3	80	135.9	113.6
20	202.6	105.3	90	-	113.6
30	195.4	108.0	95	117.4	-
40	187.2	107.8	97	118.0	-
50	177.5	112.2	100	122.7	-

1,8-Dinitronaphthalene ($C_{10}H_6O_4N_2$) + Picric acid
($C_6H_3O_7N_3$)

Urbanski and Kwiatkowski, 1934

%	f. t.	E	%	f. t.	E
0	165.5	-	60	93.7	93.0
8	157.2	-	70	98.5	91.3
10	156.1	(80.3)	80	106.9	90.1
15	150.2	(79.4)	85	110.3	(79.1)
20	146.8	(83.3)	88	112.1	(78.2)
30	133.8	90.6	90	144.4	93.0
40	118.2	90.6	93	115.6	92.0
45	109.4	91.2	100	122.7	-
50	102.3	92.2			

Nitroacenaphthene ($C_{12}H_9O_2N$) + Picric acid
($C_6H_3O_7N_3$)

Efremov, 1915 and 1918

wt%	mol%	f. t.	E	min.
100	100	122.4	-	-
97	96.56	118.4	-	-
90	94.29	115.8	62.6	36
85	88.66	110.6	68.6	50
75	77.66	105.7	68.8	90
70	72.28	100.0	69.1	140
-	66.99	95.5	69.7	180
60	56.59	88.2	"	250
53.52	50	75.7	"	470
50	46.40	69.7	-	650
45	41.59	76.1	69.7	460
40	36.68	81.4	"	360
-	-	85.6	"	216
30	27.14	92.7	63.0	72
-	-	96.5	-	-
10	8.85	98.8	-	-
5	4.38	100.0	-	-
2.5	2.18	100.4	-	-
0	0	100.9	-	-

Nitroacenaphthene ($C_{12}H_9O_2N$) + Styphnic acid
($C_6H_5O_8N_3$)

Efremov, 1916

wt%	mol%	f. t.	E	min.
100	100	175.5	-	-
97.0	96.34	171.2	-	-
95.0	93.92	168.5	-	-
90.0	87.97	161.9	-	-
85.0	82.21	155.9	77.0	96
80.0	76.47	147.3	78.2	140
75.0	70.96	139.6	79.3	190
70.0	65.46	131.5	80.3	240
60.0	54.92	107.3	80.3	380
55.18	50.90	89.3	80.3	460
50.0	44.82	81.2	-	460
45.0	39.97	83.2	80.2	360
40.0	35.13	85.2	80.2	280
30.0	25.82	89.2	80.0	180
20.0	16.88	93.3	78.2	90
15.0	12.58	95.4	76.9	48
10.0	8.28	97.1	-	-
5.0	4.10	99.0	-	-
2.5	2.05	100.1	-	-
0	0	100.9	-	-

FORMAMIDE + FORMIC ACID

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XXXVI. OXYGEN-NITROGEN DERIVATIVES + ACIDS .

Formamide (CH_3ON) + Formic acid (CH_2O_2)

English and Turner, 1915

mol%	f.t.	mol%	f.t.
100	+7.77	46.72	+1.1 (1+1)
94.83	+3.9	43.35	+0.7 "
88.56	-0.9	41.14	-0.5 "
79.4%	-10.3	38.10	-2.2 "
74.88	-16.8	34.36	-4.9 "
71.00	-12.7 (1+1)	30.24	-8.7 "
66.05	-6.4	26.07	-14.1
64.38	-6.0	21.44	-16.3
60.84	-3.7	16.59	-11.4
59.49	-1.6	9.81	-5.0
54.13	+0.2	0	+2.05
49.94	+1.1		

Merry and Turner, 1914

mol%	d		η	
	25°	40°	25°	40°
0	1.1282	1.1104	3359	2379
10	.1408	.1220	3341	2368
19.99	.1506	.1315	3314	2355
30	.1604	.1408	3286	2342
39.99	.1703	.1500	3196	2310
49.98	.1793	.1582	3057	2230
60	.1882	.1666	2850	2065
69.85	.1958	.1733	2557	1849
79.95	.2025	.1793	2316	1685
90	.2109	.1835	1946	1429
100	.2097	.1846	1599	1201

Formamide (CH_3ON) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

English and Turner, 1915

mol%	f.t.	mol%	f.t.
100	+16.60	42.37	-18.7 (1+2)
98.386	15.60	37.99	-22.7 "
95.169	13.71	33.72	-28.2 "
89.29	10.01	32.52	-29.3 "
86.15	7.82	30.66	-27.6
81.01	3.82	29.16	-25.1
74.23	-2.41	26.65	-22.3
68.25	-7.55	22.79	-16.3
64.33	-8.2 (1+2)	18.41	-11.9
60.95	-8.4	14.94	-9.0
57.30	-9.4	8.09	-3.24
53.07	-11.2	3.28	+0.10
49.95	-12.4	0	+2.05
46.74	-15.3		

Merry and Turner, 1914

mol%	d		η	
	25°	40°	25°	40°
0	1.1285	1.1104	3359	2379
9.62	.1251	.1069	3824	2589
20.39	.1165	.0978	4146	2899
29.74	.1113	.0926	4316	2903
40.56	.1089	.0898	4341	2904
49.82	.0982	.0789	4217	2791
59.89	.0906	.0707	3864	2589
69.42	.0815	.0604	3481	2361
78.95	.0723	.0518	2855	2029
80.10	.0590	.0381	2001	1462
100°	.0433	.0214	1280	987

Kendall and Gross, 1921

mol%	κ	mol%	κ
25°			
100.00	0.00024	46.85	0.51570
96.00	.00436	35.52	.62920
88.92	.03388	26.59	.64180
78.95	.20140	19.99	.60540
71.58	.30005	15.89	.51500
63.58	.38030	4.82	.17720
55.26	.44810	0	.09140

Formamide (CH_3ON) + Propionic acid ($\text{C}_3\text{H}_6\text{O}_2$)

English and Turner, 1915

mol%	f.t.	mol%	f.t.
100	-20.71	42.59	-14.4 (2+1)
92.975	23.5	40.64	13.2 "
88.64	25.0	37.56	12.3 "
80.78	28.5	33.82	11.6 "
72.81	33.0	30.93	11.2 "
67.75	36.7	29.04	12.5
62.64	34.8 (1+1)	27.29	13.9
58.75	24.7	25.61	16.3
55.50	23.7	22.76	15.4
52.64	21.9	19.86	12.4
54.80	21.8	12.25	6.2
48.94	20.5	8.25	3.02
46.25	17.4 (2+1)	3.93	-0.1
44.45	15.6	0	+2.07

Merry and Turner, 1914

mol%	d		η	
	25°	40°	25°	40°
0	1.1294	1.1104	3359	2375
1.40	.1264	-	3838	-
8.99	.1217	1.044	5590	3551
18.85	.1152	.0971	6920	4480
26.62	.1050	.0870	7190	4708
40.13	.0820	.0627	6980	4528
50.24	.0668	.0484	6480	4160
60.21	.0518	.0327	5670	3546
70.08	.0360	.0168	4445	2877
80.51	.0192	0.9996	3368	2231
89.98	.0030	0.9829	2150	1520
100	0.9856	0.9650	1035	843

Formamide (CH_3ON) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)

English and Turner, 1914

mol%	f.t.	mol%	f.t.
100	-4.67	38.13	-12.6 (2+1)
81.55	11.72	33.63	12.3 "
72.71	15.57	29.97	12.9 "
67.17	20.45	22.55	11.8 "
58.85	23.4	19.33	9.47
56.50	24.7	15.97	7.82
52.63	24.5 (1+1)	12.66	5.35
49.81	24.3 "	9.05	3.35
48.20	18.7 (2+1)	4.97	-0.67
46.17	16.3 "	1.89	+1.25
41.58	13.8 "	0	2.20

Merry and Turner, 1914

mol%	d		η	
	25°	40°	25°	40°
0	1.1287	1.1104	3359	2379
4.90	.1136	.0959	4986	3252
14.30	.1067	.0890	7330	4779
20.10	.0920	.0742	8510	5540
29.89	.0679	.0502	9170	5800
40.04	.0474	.0294	9330	5800
49.73	.0294	.0112	8410	5370
59.69	.0121	0.9941	7110	4456
69.87	0.9959	.9772	5240	3461
79.56	.9796	.9690	3534	2563
89.57	.9648	.9462	2333	1734
100	.9500	.9307	1554	1227

Formamide (CH_3ON) + Palmitic acid ($\text{C}_{16}\text{H}_{32}\text{O}_2$)

Magne, Hughes and al., 1952

mol%	f.t.	mol%	f.t.	sat.t.
100	62.5	34.55	56.3	-
88.24	61.1	32.54	56.1	-
78.57	60.8	28.06	56.0	-
61.04	58.7	22.17	55.9	75.4
58.48	58.5	11.38	55.8	-
54.50	58.1	3.56	55.7	76.6
51.87	58.0	0.32	55.9	76.7
44.63	57.2	0.00	2.4	-
37.41	56.5			

Acetamide ($\text{C}_2\text{H}_5\text{ON}$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Othmer, 1943

mol%		b.t.	mol%		b.t.
L	V		L	V	
0	0	222	50	95.4	148.9
3	38.7	212.8	60	97.2	140.1
5	47.2	208.9	70	98.2	132.7
10	61.5	199.1	80	98.8	126.4
20	79.2	183.0	90	99.4	121.2
30	88.0	168.9	100	100.0	118.2
40	92.5	157.8			

Kremann, Mauermann and Oswald, 1923

%	f.t.	%	f.t.
0.0	80.0	62.4	-10.0
10.7	69.0	62.9	-10.5
19.3	58.5	64.6	-12.0
26.4	49.0	65.7	-12.5
32.4	40.5	67.5	-15.0
37.4	31.6	69.4	-16.5
42.8	24.0	69.6	-16.5
45.6	13.5	70.7	-14.0
48.9	3.0	77.7	- 9.5
51.9	5.5	81.5	+ 1.0
54.5	6.2	87.9	+ 7.5
56.8	7.0	96.1	+13.5
59.1	8.0	100	+16.0

Albanski, 1949 (fig.)

mol%	f.t.	mol%	f.t.
0	82	51.5	-2.4 cr.t.
20	62	71.5	-17 E
40	35	80	0
50	+3	100	+16.6
(1+1)			

Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)

mol %	f.t.	mol %	f.t.
0	79.4	70	-16
20	64	80	0
40	32	100	+16
50	0		

Bokhovkina, 1956 (fig.)

mol%	f.t.	mol%	f.t.
0	75	60	-5
20	60	71.5	-17 E
40	30	80	0
51.5	-2.4	100	15

Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)			
mol%	d		
	70°	80°	90°
0	-	1.000	0.988
20	1.006	.002	.998
50	.010	.004	.996
80	.002	.994	.986
100	0.996	.984	.974
Bokhovkin and Bokhovkina, 1956			
mol%	d		
	20°	60°	80°
35	-	1.040	1.014
40	-	1.040	1.014
45	-	1.043	-
50	1.119	1.045	1.016
55	1.120	1.045	1.013
60	1.123	1.048	1.014
65	1.125	1.050	1.012
70	1.125	1.048	1.010
75	1.123	1.046	1.006
80	1.120	1.043	1.006
85	1.118	1.040	1.002
90	1.112	1.036	0.999
Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)			
mol%	η		
	70°	80°	90°
0	-	1610	1420
10	1900	1600	1380
30	1630	1360	1180
50	1300	1100	920
70	950	820	700
80	830	720	600
100	620	560	500
Bokhovkin and Bokhovkina, 1956			
mol%	η		
	20°	60°	80°
30	-	2898	1349
40	-	2427	1170
50	8988	2059	1150
55	7769	1887	974
60	6689	1725	899
65	5852	1567	824
70	4817	1423	772
75	3990	1265	712
80	3230	1116	644
85	2529	981	592
90	1954	842	546
Bokhovkina, 1956			
mol%	σ		
	20°	60°	80°
10	29.45	25.38	24.44
15	30.04	26.46	25.03
20	30.83	27.14	25.90
25	31.81	28.02	26.86
30	32.69	28.81	27.64
35	33.57	29.89	28.52
40	34.36	30.69	29.68
45	35.04	31.46	30.47
50	35.93	32.34	31.31
55	-	33.22	-
60	-	33.81	32.88
70	-	-	34.63
Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)			
mol%	κ		
	70°	80°	90°
0	-	0.37	0.43
20	0.50	.58	.65
50	.72	.80	.87
60	.70	.80	.89
70	.62	.69	.79
90	.26	.29	.31
Bokhovkin and Bokhovkina, 1956			
mol%	κ		
	20°	60°	80°
30	-	0.711	1.27
35	-	.796	-
40	-	.895	1.57
45	-	.974	-
50	0.265	1.03	1.76
55	.302	.07	1.79
60	.307	.09	1.75
65	.307	.02	1.64
70	.293	0.915	1.444
75	.260	.760	1.185
80	.199	.559	0.860
85	.126	.338	0.531
90	.0638	.158	0.238

Acetamide (C_2H_5ON) + Butyric acid ($C_4H_8O_2$)

Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)

mol%	f.t.	mol%	f.t.
0	79.4	70	3
20	65	80	-3
40	44	91	-12.7 E
50	25	100	-4
53	10		

mol%	d		
	70°	80°	90°
0	-	1.000	0.992
20	0.985	0.980	.975
50	.958	.952	.944
80	.928	.922	.915
100	.912	.904	.900

mol%	η		
	70°	80°	90°
0	-	1620	1420
20	1700	1500	1310
50	1370	1280	1100
80	1050	950	800
100	770	700	620

mol%	κ		
	70°	80°	90°
0	-	0.35	0.425
16	0.33	.40	.445
20	.34	.40	.44
30	.28	.36	.41
50	.13	.175	.22
70	.06	.075	.10
80	.035	.050	.06
100	0.0	0.0	0.0

Acetamide (C_2H_5ON) + Valeric acid ($C_5H_{10}O_2$)

Albanski, 1949

mol%	f.t.
0	82
27.5	-42.4 E
39.9	-33.1 tr.t. (1+1)
100.0	-33.5

Acetamide (C_2H_5ON) + Caproic acid ($C_6H_{12}O_2$)

Rudenko, Dzhelamanova and Dionisiev, 1955 (fig.)

mol%	f.t.	mol%	f.t.
0	79.4	70	+1
20	62	87	-12
40	41	100	-1.5
52	7.5 E		

mol%	d		
	70°	80°	90°
0	-	1.00	0.99
20	0.97	0.96	0.95
50	0.93	0.92	0.91
80	0.90	0.89	0.88
100	0.88	0.865	0.85

mol%	η		
	70°	80°	90°
0	-	1600	1420
20	2200	1800	1570
40	2300	1920	1600
60	1960	1660	1480
80	1480	1400	1260
100	1100	1060	1000

mol%	κ		
	70°	80°	90°
0	-	0.37	0.43
20	0.24	.31	.37
40	.13	.16	.19
50	.08	.11	.13
70	.01	.02	.03
80	0	0	0

Lecat, 1949

Acetamide (C_2H_5ON) (b.t.=221.15) + Acids.

2 nd comp.		Az		
Name	Formula	b.t.	%	b.t.
Caproic acid	($C_6H_{12}O_2$)	205.15	-	202.8
Heptanoic acid	($C_7H_{14}O_2$)	222.0	-	216.5
Caprylic acid	($C_8H_{16}O_2$)	238.5	-	219.5

Acetamide (C_2H_5ON) + Lauric acid ($C_{12}H_{24}O_2$)

Albanski, 1949

mol%	f. t.
0	82
28.2	38 E
47.7	43 tr. t. (1+1)
100	43.85

Magne and Skau, 1952

mol%	f. t.	
	I	II
100	43.77	-
90.01	42.0	-
80.56	40.4	-
75.80	39.4 E	-
70.50	40.8	-
65.10	42.1	-
60.48	42.8	-
55.16	43.5	-
54.8	43.5 (1+1)	-
51.89	48.6	-
50.00	51.5	43.6 (1+1)
47.16	54.9	43.7
45.8	-	43.3 E
44.22	-	45.8
39.82	63.5	51.5
34.84	67.8	56.8
19.80	75.2	64.6
9.87	77.9	67.2
0	79.72	69.54

Acetamide (C_2H_5ON) + Myristic acid ($C_{14}H_{28}O_2$)
Magne and Skau, 1952

mol%	f. t.	
	I	II
100	53.85	-
79.92	51.2	-
74.94	50.0	-
69.71	48.9	-
69.0	48.7 E	-
68.42	48.9	-
66.51	49.4	-
65.08	49.8	-
64.09	50.1	-
59.79	50.9	-
59.52	50.8	-
52.17	50.4	-
51.1	51.5 (1+1)	-
50.19	53.5	-
50	-	51.5 (1+1)
49.05	54.8	-
48.27	-	51.4
46.66	58.3	51.3
44.82	-	51.2
43.09	-	51.1
42.7	-	51.0 E
39.99	-	54.3
34.98	-	59.0
34.53	70.4	59.3
30.33	-	62.3
24.44	-	65.1
18.21	77.1	66.9
15.18	-	67.5
15.04	-	67.6
9.63	78.7	68.4
0	79.72	69.54

Acetamide (C_2H_5ON) + Palmitic acid ($C_{16}H_{32}O_2$)

Magne and Skau, 1952

mol%	f. t.	
	I	II
100	62.45	-
90.37	61.3	-
80.81	60.1	-
74.62	59.1	-
70.67	58.4	-
64.8	57.2 E	-
60.83	58.0	-
55.39	58.8	-
50.19	59.1	-
50	59.1 (1+1)	-
48.5	59.0 E	-
44.93	62.5	58.7
38.2	-	57.7 E
37.91	-	58.1
34.98	70.7	-
34.52	-	61.0
19.91	77.1	67.1
10.10	-	68.7
0	79.72	69.54

Acetamide (C_2H_5ON) + Stearic acid ($C_{18}H_{36}O_2$)

Magne and Skau, 1952

mol%	f. t.	
	I	II
100	69.29	-
90.09	68.2	-
80.28	66.9	-
75.12	66.2	-
65.16	64.7	-
61.6	64.0	-
59.29	64.5	-
55.23	64.7	-
50.74	65.4 (1+1)	-
50	65.4	-
47.91	65.4	-
47.1	65.3 E	-
45.35	67.4	65.3
39.82	-	65.2
35.44	73.7	64.7
34.6	-	64.7 E
19.89	-	68.3
9.90	79.5	69.1
0	79.72	69.54

Rudenko, Dzhelomanova and Dionisiev, 1955 (fig.)

mol%	f. t.	mol%	f. t.
0	79.4	52	58.7 E
20	77.5	80	66
30	74	100	68.8

mol%	d		
	70°	80°	90°
0	-	1.000	0.988
20	-	0.920	.905
40	0.882	.875	.863
60	.863	.855	.860
80	.852	.845	.838
100	.850	.835	.830

mol%	η		
	70°	80°	90°
0	-	165	145
20	-	325	275
30	-	410	325
40	530	420	325
60	480	400	310
80	460	360	280
100	450	350	260

mol%	κ		
	80°		90°
0	0.36		0.44
20	.12		.16
30	.04		.05
40	.01		.02
70	0		0

Acetamide (C_2H_5ON) + Oleic acid ($C_{18}H_{34}O_2$)

Mod and Skau, 1952

mol%	f. t.	
	I	II
100	16.3	13.5
95.58	15.9	-
90.63	-	12.2
87.40	15.1	-
85.0	14.8 E	-
82.80	16.3	11.4
78.46	18.4	10.7
78.25	18.3	-
75.35	19.1	-
69.45	20.5	-
69.2	20.6 (1+1)	-
65.86	31.6	20.7
63.27	37.7	21.3
60.8	-	21.6
60.66	42.3	21.8 (1+1)
55.60	-	35.6
51.46	56.0	43.0
29.39	75.2	64.3
17.83	78.0	67.8
0	79.7	69.5

Acetamide (C_2H_5ON) + Elaidic acid ($C_{18}H_{34}O_2$)

Mod and Skau, 1952

mol%	f. t.	
	I	II
100	43.8	-
89.69	42.5	-
80.53	41.5	-
70.13	40.2	-
65.8	39.6 E	-
63.99	39.9	-
62.2	40.0 (1+1)	-
59.92	45.1	40.3
55.04	51.6	40.8
53.92	53.6	40.8
52.8	-	40.9 (1+1)
49.41	59.9	47.1
39.74	69.7	58.4
29.79	75.1	64.6
20.25	78.1	67.9
9.94	79.4	69.0
0	79.7	69.5

Acetamide (C_2H_5ON) + Chloracetic acid ($C_2H_3O_2Cl$)

Albanski, 1949 (fig.)

mol%	f. t.	mol%	f. t.
0	82	65.95	13.2
20	57	80	40
40	19	100	61.8
44.9	5.6 E		
50	8.0 (1+1)		
55	4.7 E		

Bokhovkina, 1956

mol%	f. t.	mol%	f. t.
100	70	44.9	5.6 E
80	45	40	16
65.95	13.2 tr. t.	20	45
55	4.7 E	0	80
50	8 (1+1)		

Bokhovkin and Bokhovkina, 1956

mol%	d		
	50°	70°	90°
30	-	1.026	1.022
35	1.035	.030	.027
40	.048	.034	.034
45	.042	.038	.034
48	.047	.040	.036
50	.047	.042	.038
52	.049	.044	.040
55	.051	.046	.042
58	.053	.048	.044
60	.055	.050	.045
65	.059	.053	.049
70	.061	.057	.052
75	.064	.059	.056

mol%	η		mol%	η	
	70°	90°		70°	90°
30	1920	1130	55	2010	-
35	1950	1150	58	2020	1190
40	1970	1160	60	2000	1190
45	1990	1170	65	1980	1180
48	1990	1180	70	1950	1170
50	2000	1180	75	-	-
52	2010	1180			

mol%	σ		
	50°	70°	90°
80	40.51	37.31	34.15
75	40.80	37.59	34.45
70	41.09	37.81	34.65
65	41.39	38.00	34.81
60	41.72	38.19	34.97
55	41.70	38.20	35.07
50	41.61	38.22	35.15
45	41.72	38.35	35.15
40	41.88	38.59	35.40
35	42.05	38.80	35.61
30	42.25	39.11	35.89

mol%	κ		
	50°	70°	90°
30	-	5.33	7.74
35	2.81	6.10	10.0
40	3.21	6.59	11.7
45	3.54	7.14	13.3
48	3.68	7.49	14.1
50	3.87	7.74	14.8
52	3.94	7.94	15.6
55	4.15	8.24	16.1
58	4.30	8.33	-
60	4.38	8.45	16.4
65	4.53	8.42	16.4
70	4.43	8.15	15.5
75	4.15	7.47	14.0
80	-	-	11.6

Acetamide (C_2H_5ON) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Albanski, 1949 (fig.)

mol%	f. t.		mol%	f. t.	
0	82		58.3	20.6	E
30	33		67	29.3	(1+2)
35.88	14	E	75.8	22.3	E
40	20		80	35	
50	26.0	(1+1)	100	61.8	

Bokhovina and Bokhovin, 1956

mol%	f. t.		mol%	f. t.	
20	50		67	29.3	(1+2)
35.88	14	E	75.8	22.3	E
50	26	(1+1)	90	50	
58.3	20.6	E	100	57	

mol%	d		
	50°	60°	70°
30	1.061	1.059	1.057
32	.064	.062	.060
38	.073	.070	.068
40	.075	.073	.070
45	.083	.080	.078
50	.089	.086	.084
55	.094	.091	.089
60	.099	.097	.094
62	.101	.098	.097
65	.103	.100	.098
70	.108	.105	.103
72	.109	.107	.105
75	.111	.109	.107

mol%	η		
	50°	60°	70°
30	11400	6570	4180
32	11640	6670	4370
38	12550	7220	4450
40	12870	7350	4560
45	13510	7740	4810
50	14770	8140	5050
55	14770	8570	5250
60	15330	8990	5410
62	15340	9120	5470
65	15380	9240	5450
70	14820	9440	5260
72	14370	9310	5150
75	13620	9080	4900

mol%				Acetamide (C_2H_5ON) + Benzoic acid ($C_7H_5O_2$)					
	50°	60°	70°	Kremann, Mauermann and Oswald, 1923					
				%	f. t.	E	%	f. t.	E
90	-	32.25	31.55	0.00	80	-	98.55	57.0	-
85	-	32.81	32.14	2.34	79	-	47.52	49	38
80	34.31	33.42	32.75	10.24	75	-	53.60	42	"
75	35.02	34.10	33.46	13.50	73	-	56.47	38	-
72	35.51	34.63	33.89	16.14	72	-	59.28	47	37
70	35.71	34.92	34.10	20.63	69	-	64.90	63	"
65	36.40	36.05	34.84	24.24	67	-	70.99	79	-
62	36.81	36.05	35.09	93.33	64	-	85.40	102.5	-
60	37.04	36.27	35.31	94.33	60.5	-	94.26	115	-
55	37.23	36.51	35.79				100	121.5	-
50	37.57	36.64	36.05						
45	37.82	37.05	36.32						
40	38.24	37.43	36.53						
38	38.87	37.21	36.74						
32	38.90	38.12	37.13						
30	39.15	38.28	37.36						
mol%				Sorun and Durand, 1952					
	50°	60°	70°						
				%	f. t.				
30	13.8	18.6	26.0	0	79.0				
32	13.8	19.0	26.4	-	37.2				
38	14.0	19.1	26.5	100	121.5				
40	14.0	19.2	25.9						
45	13.7	18.6	24.9						
50	13.4	17.8	24.3						
55	13.4	17.4	24.1						
60	13.6	17.3	23.8						
65	13.9	17.2	23.7						
70	13.9	17.0	22.9						
72	14.0	16.7	22.3						
75	13.4	15.9	21.0						
Acetamide (C_2H_5ON) + Cyanacetic acid ($C_3H_3O_2N$)				Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)					
Albanski, 1949 (fig.)				mol%	d				
mol%	f. t.	mol%	f. t.		112°	122°	132°		
0	82	60	57	0	0.98	0.97	0.96		
20	60	75.65	35.9 E	20	1.02	1.01	1.00		
28.2	49.6 E	80	45	30	1.03	1.02	1.01		
40	58	100	68.8	40	1.04	1.035	1.02		
50	62.6 (1+1)			50	1.07	1.04	1.03		
				60	1.075	1.07	1.05		
				70	1.08	1.07	1.055		
				80	-	1.07	1.06		
				100	-	1.08	1.07		
				mol%	η				
					112°	122°	132°		
				0	1200	1030	910		
				20	1530	1310	1150		
				30	1750	1440	1300		
				40	1950	1640	1400		
				50	2000	1700	1440		
				60	1990	1710	1450		
				70	1900	1640	1440		
				80	-	1600	1400		
				100	-	1500	1300		
				mol%	κ				
					112°	122°	132°		
				0	0.3	0.3	0.3		
				10	0.65	0.72	0.85		
				20	0.75	0.86	0.98		
				30	0.60	0.70	0.85		
				40	0.42	0.50	0.60		
				50	0.30	0.35	0.42		
				60	0.19	0.22	0.21		
				70	0.08	0.08	0.09		
				80	0.05	0.05	0.05		
				90	0.02	0.02	0.02		
				100	0	0	0		

Acetamide (C_2H_5ON) + Salicylic acid ($C_7H_6O_3$)

Kremann and Auer, 1918

%	f. t.	%	f. t.	E
100	157.0	53.9	58.0	52.0
93.0	144.0	53.4	57.5	51.0
87.5	137.0	52.6	56.0	-
84.9	129.5	50.6	55.2	-
79.2	115.8	49.4	53.4	52.2
74.5	103.5	45.3	54.5	51.9
73.1	97.8	40.7	57.0	52.0
68.1	76.0	40.5	57.5	"
67.6	76.0	36.5	60.0	51.5
64.3	63.0	32.9	62.2	50.2
60.9	48.2	20.4	64.1	-
60.0	62.2	20.5	68.1	-
59.0	62.4	11.2	72.3	-
56.5	59.5	5.8	74.2	-
		0	76.5	-

(1+1)

Rheinboldt, 1925

%	f. t.	E	%	f. t.	E
100	156.5	156.0	62.9	64.0	53.0
83.2	137.0	65.0	56.9	61.5	"
76.9	122.0	"	54.5	60.0	"
71.1	97.0	"	51.3	58.0	"
70.7	94.0	"	44.7	56.0	"
69.1	83.0	64.0	30.4	66.0	"
65.4	65.0	53.0	19.7	72.0	"
			0	82.0	80.5

(1+1) (3+2) (2+1)

Dzhelomanova, Rudenko and Dionisyev, 1956

mol%	f. t.	mol%	f. t.
0	79.5	50	90
10	72	60	120
20	65	70	135
27	56 E	80	145
30	58	90	150
40	65	100	156
44	70 tr. t.		

mol% d mol% d

161°

0	0.95	60	1.12
20	1.02	70	1.14
30	1.05	80	1.16
40	1.07	90	1.165
50	1.10	100	1.17

mol% 130° 140° 150° 161°

0	1010	980	920	880
20	1200	1120	1030	1000
30	1300	1200	1100	1040
40	1400	1250	1150	1050
50	1450	1320	1200	1100
60	1460	1350	1250	1150
70	-	1350	1270	1200
80	-	-	-	1220
90	-	-	-	1230
100	-	-	-	1220

mol% 130° 140° 150°

0	0.35	0.35	0.35
10	0.75	0.90	1.35
20	1.0	1.45	1.90
30	1.10	1.45	1.75
40	1.0	1.20	1.90
50	0.75	0.90	1.0
60	0.50	0.60	0.70
70	-	0.35	0.40

Acetamide (C_2H_5ON) + Cinnamic acid ($C_9H_8O_2$)

Dzhelomanova, Rudenko and Dionisyev, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	79.5	40	80
10	76	50	90
20	68	60	98 tr. t.
30	60	80	122
33	56 E	100	133

mol%				Propionamide (C ₃ H ₇ ON) + Palmitic acid(C ₁₆ H ₃₂ O ₂)			
		d					
		125°	135°	145°			
0	0.965	0.955	0.935				
20	1.000	0.99	0.98				
30	1.02	1.01	1.00				
40	1.03	1.025	1.01				
50	1.05	1.035	1.025				
60	1.055	1.05	1.035				
70	1.06	1.05	1.045				
80	1.07	1.06	1.05				
100	-	1.065	1.055				
mol%		η					
		125°	135°	145°			
0	1200	1100	1000				
20	1900	1600	1400				
30	2300	1800	1600				
40	2700	2100	1800				
50	2900	2400	2000				
60	3300	2600	2200				
70	3600	2800	2300				
80	3700	2900	2400				
90	-	3000	2400				
100	-	2900	2400				
mol%		κ					
		125°	135°	145°			
0	0.30	0.30	0.30				
10	0.92	1.02	1.15				
20	0.93	1.02	1.12				
30	0.80	0.85	1.00				
40	0.62	0.70	0.80				
50	0.48	0.55	0.62				
60	0.28	0.35	0.40				
70	0.15	0.18	0.20				

Magne, Hughes and al., 1952							
mol%		f.t.		mol%		f.t.	
100	62.5	44.94	51.5				
88.02	60.8	41.26	56.7				
79.98	59.5	40.02	58.6				
74.95	58.8	39.93	58.5				
67.95	57.4	37.00	61.8				
59.58	55.4	28.59	69.5				
52.05	52.7	19.99	74.5				
49.32	51.4	10.08	77.7				
45.96	50.1 E	0	79.8				

Butyramide (C ₄ H ₉ ON) + Palmitic acid (C ₁₆ H ₃₂ O ₂)							
Magne, Hughes and al., 1952							
mol%		f.t.		mol%		f.t.	
100	62.5	55.66	68.7				
89.58	61.2	49.98	77.4				
79.61	59.6	39.78	90.0				
69.69	57.5	30.06	99.3				
63.0	56.0 E	15.03	108.6				
62.73	56.5	0	115.3				

Isobutyramide (C ₄ H ₉ ON) + Palmitic acid (C ₁₆ H ₃₂ O ₂)							
Magne, Hughes and al., 1952							
mol%		f.t.		mol%		f.t.	
100	62.5	49.84	88.2				
79.74	59.4	40.49	99.2				
69.92	57.5	30.05	110.9				
69.0	57.4 E	20.06	117.8				
64.23	65.4	0	127.6				
59.94	72.2						

Stearamide (C ₁₈ H ₃₇ ON) + Palmitic acid (C ₁₆ H ₃₂ O ₂)							
Magne, Hughes and al., 1952							
mol%		f.t.		mol%		f.t.	
100	62.5	80.12	69.3				
94.57	61.9	68.35	77.8				
89.8	61.4 E	51.48	88.2				
89.33	61.8	33.39	97.6				
84.92	64.2	0	108.6				

Acetamide (C ₂ H ₅ ON) + Anthranilic acid (C ₇ H ₇ O ₂ N)							
Dzhelomanova, Rudenko and Dionisiev, 1956 (fig.)							
mol%		f.t.		mol%		f.t.	
0	79.5	60	112				
10	75	70	120				
20	65	80	130				
32	48 E	90	140				
40	75	100	145				
50	95						
mol%		κ					
		127°	137°	147°			
0	0.30	0.30	0.30				
10	0.80	1.10	1.50				
20	1.10	1.40	1.90				
30	1.15	1.50	2.00				
40	1.10	1.40	2.00				
50	1.00	1.20	1.65				
60	0.70	0.95	1.25				

Chloracetamide (C_2H_4ONCl) + Palmitic acid
($C_{16}H_{32}O_2$)

Magne, Hughes and al., 1952

mol%	f.t.	mol%	f.t.
100	62.5	59.19	105.7
96.77	62.3	49.30	110.4
92.5	61.8 E	39.48	112.4
91.70	64.6	30.11	115.0
86.13	79.2	20.31	115.9
76.43	92.8	9.85	116.5
68.79	99.8	0	117.6

Urea (CH_4ON_2) + Formic acid (CH_2O_2)

Bergmann and Kuznetsova, 1939

mol%	f.t.	mol%	f.t.
100	7.4	67	-11.5
97	4.6	66	-12.8
95	3.0	65	-15.5
92	-0.2	63	-8.7
88	-5.4	60	-1.0
85	-8.9	50	+28.0
82	-14.1	40	60.8
80	-20.2	30	84.1
78	-16.3	20	105.6
75	-13.4	10	122.5
72	-12.2	0	132.7
70	-11.6		(1+2)

Kuznetsova and Bergman, 1956

mol%	f.t.	mol%	f.t.
100.0	7.4	62.0	- 10.5
95.0	3.0	60.0	- 7.4
92.0	-0.2	58.0	- 5.5
88.0	-5.4	56.0	- 3.5
85.0	-8.9	55.5	- 3.0
82.0	-14.1	55.0	- 1.6
80.0	-20.2	54.0	10.7
78.0	-16.3	50.0	32.5
75.0	-13.4	40.0	60.8
72.0	-12.2	30.0	84.1
70.0	-11.6	20.0	105.6
66.7	-11.5	10.0	122.5
66.0	-12.8	0.0	132.5
65.0	-15.5		(1+2)

Urea (CH_4ON_2) + Acetic acid ($C_2H_4O_2$)

Kremann, Weber and Zechner, 1925

 E_1 : 90% 9.8° E_2 : 60% 34-35°

(1+2)

Kremann, Weber and Zechner, 1925

mol%	f.t.	mol%	f.t.
100	16	50	61
96.2	13	45.7	72.0
90.9	11	40.1	83.5
81.9	26	30.5	96.0
74.5	33	25.4	104
73.5	33.6	20.3	109
69.3	37.2	18.3	111
68.3	38.2	12.3	117
64.1	39	6.89	123.5
57.1	39.2	0	131.5
54.7	49		

Pushin and Rikovski, 1932

mol%	f.t.	E
100	17	-
95	13	13
91	19.5	12
90	22	12.5
83	32	11.5
80	35	11
77	37.5	9
71.5	39.5	0
70	40	-
66.7	41	-
63	40	34 (1+2)
60	38.5	36.5
58	37	36
55	47.5	36.5
50	63.5	36
40	86	33.5
28.5	102	26
23	108	18.5
17	114	-
9	123	-
0	131	-

Vetrov, 1937

mol%	f.t.	E
100	16.8	-
97	15.3	3.8
95	13	12.4
92	19.7	12
85	30.8	11.5
75	39.9	-
66.7	41.5	- (1+2)
64	40.7	-
58	39	-
54	53	39
52	50	"
50	65.5	"
48	71	-
46	76	-
44	81.5	-
40	90.5	-
35	92.5	-
30	101.5	-
20	110.5	-
14	116.8	-
10	121.5	-
5	125	-
0	132.6	-

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	16.6	60	36.9
97	14.5	55	51.0
95	12.6	45	71.5
92	17.5	46	90.5
88	24.0	27	103.5
85	27.3	20	109.9
80	34.0	16	114.5
75	37.0	11	119.7
70	38.8	5	125.9
66	39.0	0	132.7
65	38.6		

Rudenko and Dionissiev, 1954

mol%	d		
	80°	90°	100°
100	1.00	0.97	0.96
80	1.06	1.05	1.03
60	1.125	1.11	1.10
40	1.18	1.165	1.15
30	-	-	1.18

Bokhovkina, 1956

mol%	d		
	45°	60°	70°
95	1.049	1.033	1.023
90	.065	.050	.039
85	.082	.067	.057
80	.097	.083	.073
78	.112	.098	.089
72	.121	.107	-
70	.126	.112	.104
67	.135	.121	.113
65	.140	.126	.116
60	.155	.142	.132
55	.170	.156	.146
50	-	.167	.157

Bokhovkina, 1956

mol%	η		
	45°	60°	70°
95	968	685	586
90	1344	883	724
85	1859	1161	904
80	2595	1494	1149
75	3480	1904	1429
70	4635	2440	1760
65	5902	2968	2122
60	7328	3565	2519
55	-	4183	2960
50	-	-	3392

Bokhovkina and Bokhovkin, 1956

mol%	σ			
	45°	60°	70°	80°
95	26.65	25.31	24.40	23.51
90	27.79	26.39	25.40	24.41
85	28.91	27.60	26.61	25.70
80	29.85	28.55	27.70	26.80
75	31.56	30.19	29.35	28.41
70	32.74	31.27	30.41	29.43
67	33.92	32.41	31.43	30.60
65	34.07	32.74	31.71	30.78
60	35.69	34.51	33.61	32.71
55	37.46	36.13	35.26	34.39
50	-	37.80	36.88	35.99

Rudenko and Dionissiev, 1954

mol%	κ		
	80°	90°	100°
100	520	500	480
80	1200	1100	1000
60	2500	2250	2000
40	4000	3600	3200
30	-	-	3800

Urea (CH_4ON_2) + Propionic acid ($\text{C}_3\text{H}_6\text{O}_2$)

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	-22.4	68	20.1
97	-24.3	67	22.4
95	-25.5	66	22.6
92	-21.9	63	32.4
88	-14.9	60	44.5
85	-13.6	54	68.1
80	-1.5	48	83.4
78	6.4	29	104.5
75	11.5	19	112.5
72	14.6	10	122.2
70	17.5	0	132.7

Urea (CH_4ON_2) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	-8.3	67	+51.0
97	-10.4	65	57.9
95	-11.4	60	68.5
92	-13.3	55	81.5
88	-15.2	50	92.5
85	-18.0	40	107.3
82	-18.9	30	114.8
80	+5.3	20	118.5
75	25.4	19	126.2
70	41.5	0	132.7

Rudenko and Dionisiev, 1953

mol%	d	mol%	d
135°			
100	0.86	40	1.07
80	0.92	20	1.11
60	1.00		
mol%		η	
	110°	120°	135°
100	500	400	200
80	800	1000	1150
60	1550	1800	2200
40	2700	3150	3600
20	3900	4700	-

Urea (CH_4ON_2) + Valeric acid ($\text{C}_5\text{H}_{10}\text{O}_2$)

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	-33.6	65	64.0
95	-36.0	60	80.2
92	-40.0	55	91.3
88	-26.6	50	96.9
85	-21.1	45	104.5
82	-5.5	40	108.5
80	14.5	30	116.5
75	37.2	20	122.3
70	52.2	0	132.7
67	60.6		

Urea (CH_4ON_2) + Pelargonic acid ($\text{C}_9\text{H}_{18}\text{O}_2$)

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	10.7	70	93.5
97	9.6	67	96.3
96	8.0	65	101.7
95	13.9	60	111.3
92	18.7	50	122.5
90	37.0	40	126.8
88	44.0	30	129.3
85	57.0	20	131.7
80	72.5	10	132.3
75	84.7	0	132.7

Urea (CH_4ON_2) + Lauric acid ($\text{C}_{12}\text{H}_{24}\text{O}_2$)

Bergmann and Kuznetsova, 1939

mol%	f. t.	mol%	f. t.
100	44.0	75	106.5
97	43.9	70	112.5
94	43.5	67	115.5
92	61.0	60	121.5
88	74.5	55	127.5
85	81.6	50	129.0
82	90.1	45	130.0
80	95.5	0	132.7

Urea (CH_4ON_2) + Succinic acid ($\text{C}_4\text{H}_6\text{O}_4$)

Kremann, Weber and Zechner, 1925

%	f. t.	%	f. t.
51.8	53	19.0	112
46.5	62	9.6	123
41.6	76.3	3.5	128
34	92	0	131
26.5	104		

Urea (CH_4ON_2) + Chloracetic acid ($\text{C}_2\text{H}_3\text{O}_2\text{Cl}$)

Pushin and Rikovsky, 1932

mol%	f.t.	E
100	61	-
90	54	22
85	48.5	33.5
80	42.5	32.5
75	34	34
72	35.5	-
70	36.2	-
68	36.5	-
66.7	37	(1+2)
65	36.5	-
63	35.5	-
60	34	34
57	36.5	-
55	38	-
53	39	-
50	40	40
45	54	39
40	70	37.5
30	93	-
20	107	-
10	118	-
0	131	-

Bokhovkina and Bokhovkin, 1956 (fig.)

mol%	f.t.	mol%	f.t.
100	60	50	45
90	56	40	75
80	45	20	100
72	40	0	133
60	40		

Rudenko and Dionisiev, 1953

mol%	d		
	80°	90°	100°
0	1.358	1.34	1.325
20	.362	.345	.332
40	.363	.345	.335
60	.358	.340	.328
70	-	.336	.322
80	-	-	.318

Bokhovkina, 1956

mol%	d		
	65°	80°	90°
100.0	1.356	1.343	1.335
85.12	.355	.341	.328
78.30	.355	.336	.325
72.03	.352	.332	.320
65.58	.350	.328	.315
59.71	.345	.324	.310
54.26	.340	.319	.306
48.83	.335	.314	.229
46.72	.333	.313	.298

Rudenko and Dionisiev, 1953

mol%	η		
	80°	90°	100°
100	210	200	190
80	450	360	280
60	800	600	480
40	1180	880	660
30	-	1050	800
20	-	-	950

Bokhovkina, 1956

mol%	η		
	65°	80°	90°
85.12	3708	2209	1772
78.25	4992	3059	2248
72.03	6400	3733	2757
65.58	7329	4483	3285
59.71	8408	5007	3708
54.26	9272	5503	4136
48.83	9772	5876	4325
46.72	10054	6086	-

Bokhovkina and Bokhovkin, 1956

mol%	σ			
	60°	70°	80°	90°
100.0	36.72	35.40	34.00	32.98
92.35	37.40	36.61	35.36	34.04
85.12	39.44	38.03	36.72	36.04
78.25	41.14	39.80	38.42	37.57
72.03	42.43	41.40	40.12	38.93
65.58	43.86	42.71	41.48	40.29
59.71	44.71	43.90	42.84	42.33
54.26	45.90	45.10	44.54	43.69
48.83	47.26	46.31	45.39	44.71
43.69	48.96	47.71	46.75	45.90
38.84	-	48.93	48.28	47.94
34.17	-	-	-	49.30

Urea (CH_4ON_2) + Dichloroacetic acid ($\text{C}_2\text{H}_2\text{O}_2\text{Cl}_2$)

Pushin and Rikovsky, 1932

mol%	f. t.	E
100	11	-
96	8	8
94	11	7.5
90	20.5	6
85	32	4
80	39	4
70	45	-
66.7	47.5	47.5 (1+2)
63	53	47
60	56.5	45
55	61	-
50	63.5	(1+1)
47	63	-
45	62	49
44	61	52
40	58	58
35	74	58
30	87	54
20	103	-
10	117	-
0	131	-

Bokhovkina and Bokhovkin, 1956

mol%	f. t.	mol%	f. t.
100	5	50	60
90	1	40	57
80	30	30	90
70	45	20	110
60	57	0	133

Bokhovkina, 1956

mol%	d		
	65°	70°	75°
100.0	1.490	1.485	1.480
95.81	.490	.485	.480
91.74	.490	.485	.480
87.94	.488	.484	.479
80.74	.483	.479	.475
72.50	.476	.472	.468
65.05	.467	.464	.459
58.26	.458	.454	.448
52.05	.450	.444	.438
46.35	.437	.433	.427
41.10	.428	.421	.415
39.11	.420	.415	.408

mol%	η		
	65°	70°	75°
100.0	1872	1681	1504
95.81	2389	2110	1852
91.74	3120	2672	2324
87.94	4110	3376	2550
80.74	6295	5029	4207
72.50	9747	7072	5926
65.05	11065	8970	7371
58.26	12783	10338	8604
52.05	14008	11426	9362
46.35	14801	12144	9989
41.10	15305	12674	10411
39.11	15558	12542	10341

Bokhovkina and Bokhovkin, 1956

mol%	σ			
	65°	70°	80°	90°
100.00	31.62	30.94	29.75	29.07
89.94	32.64	32.30	31.11	30.26
80.74	34.00	33.70	32.47	31.62
72.50	35.16	34.85	33.66	32.98
65.05	35.91	35.44	35.06	34.00
58.26	36.69	36.42	35.70	34.68
52.05	37.06	36.72	36.30	35.78
46.35	37.40	37.40	-	-
41.10	38.00	-	-	37.02

Urea (CH_4ON_2) + Trichloroacetic acid ($\text{C}_2\text{HO}_2\text{Cl}_3$)

Pushin and König, 1928

mol%	f. t.	E
0	132	-
30	78	53
35	-	59
37	-	59
40	63	55
45	74.5	-
50	80	-
55	78	(1+1)
60	71	-
63	63	-
65	56.5	23
78	-	27
80	-	26
85	39	23
90	46	14
100	57	-

Bokhovkina and Bokhovkin, 1956 (fig.)			
mol%	f.t.	mol%	f.t.
0.0	57	50	75
10	53	57	60
20	40	62	58
25	27	70	70
27	30	80	85
40	60	100	133

Bokhovkina, 1956			
mol%	d		
	80°	85°	95°
100.0	1.564	1.557	1.553
87.47	.564	.557	.552
78.77	.563	.557	.548
72.91	.561	.556	.544
67.53	.557	.551	.539
59.48	.548	.540	.527
52.41	.530	.524	.512
46.13	.512	.505	.492
40.53	-	.486	-
35.51	-	.469	-

mol%	η		
	80°	85°	95°
100.0	1989	1660	1362
87.47	4578	3971	2804
78.77	8753	6848	4821
72.91	11860	8912	6560
67.53	14655	11248	7737
59.48	18903	14325	9408
52.41	21714	16413	10943
46.13	20714	16137	10763
40.53	18953	14196	9446
35.51	16454	12185	-

Bokhovkina and Bokhovkin, 1956			
mol%	80°	σ 85°	90°
100.00	28.54	27.80	27.30
87.47	29.97	29.64	29.30
76.77	32.80	31.96	31.63
67.53	34.96	34.46	33.63
59.48	36.96	36.63	36.30
52.41	38.96	-	38.30
46.13	40.63	40.52	39.96
40.53	42.62	41.36	41.16
35.51	43.16	43.29	42.85
30.96	45.45	45.11	-

Urea (CH ₄ ON ₂) + Benzoic acid (C ₇ H ₆ O ₂)			
Pushin and Wilowitsch, 1925 (fig.)			
mol%	f.t.	mol%	f.t.
100	121	40	90
90	116	30	102
80	109.5	20	112
70	100	10	121
60	90	0	130
50	78 E		

Kremann, Weber and Zechner, 1925					
%	f.t.	E	%	f.t.	E
100	121	-	46.0	114	-
91.2	114	-	43.6	115	-
87.0	110	-	40.4	115.5	-
86.8	109.5	-	37.7	117	-
80.8	100.5	-	30.3	117.6	-
77.1	94.5	-	30	117.5	-
75.5	91.5	-	26.6	117.5	-
70.2	80.5	-	24.6	118	-
68.9	82	-	21.0	118.5	-
66.4	90	-	19.9	118.6	76.5
65.1	91.5	76.5	16.5	119.5	-
62.8	95	76.5	11.0	122	-
62.5	96	-	9.9	122	-
56.3	105	-	6.6	124	-
52.9	109	-	3.1	127	-
49.0	112	76.5	0	131.0	-

Rudenko and Dionisiev, 1953			
mol%	d		
	120°	135°	150°
100	-	1.08	1.07
90	1.11	.095	.075
80	.125	.11	.095
60	.15	.14	.12
40	.19	.17	.15
20	.23	.21	.19
0	-	.24	.22

mol%	η		
	120°	135°	150°
80	2500	1500	1000
60	4500	3600	2800
40	5500	4200	3350
30	5550	4200	3300
20	5300	4000	3000
0	-	2800	1400

Urea (CH_4ON_2) + Salicylic acid ($\text{C}_7\text{H}_6\text{O}_3$)

Kremann, Weber and Zechner, 1925

%	f. t.	E	%	f. t.	E
100	155	-	57.5	106	-
91.5	145	-	55.0	104	101.3
84.1	127	-	52.4	102	-
81.9	116	-	48.8	104	-
76.8	107	-	41.1	109	-
72.3	109	-	41.1	110	-
68.4	110	-	38.6	111	-
64.4	109	-	29.7	114	-
59.8	108	-	21.2	118	101.3
58.2	107	-	6.1	127	-
(1+1)					

Hrynakovski, 1934

 E_1 : 75.0% 89° E_2 : 48.0% 87.0°

Rudenko and Dionissiev, 1953 (fig.)

mol%	d		
	120°	135°	150°
20	-	-	1.180
30	-	-	1.182
40	1.210	1.196	1.185
60	1.220	1.205	1.198
80	1.232	1.218	1.204
100	-	1.228	1.218
mol%	η		
	120°	135°	150°
80	-	-	5500
70	-	10800	8000
60	16500	13000	9500
50	19000	15000	12000
40	19800	16600	13000
30	18800	15200	12800
20	14800	10200	7200
0	-	2400	1200

Urea ($\text{CH}_4\text{O}_2\text{N}$) + Anthranilic acid ($\text{C}_7\text{H}_7\text{O}_2\text{N}$)

Rudenko and Dionissiev, 1953

mol%	η		
	115°	130°	145°
90	-	-	0.7
80	-	0.9	1.2
60	1.6	1.9	2.3
40	3.0	3.7	4.3
20	4.7	5.5	6.8
10	-	6.7	7.9
0	-	-	3.8

Urea (CH_4ON_2) + Phenylacetic acid ($\text{C}_8\text{H}_8\text{O}_2$)

Bokhovkin and Chesnokov, 1955

mol %	f. t.	mol %	f. t.	mol %	f. t.
100	74.0	56.95	29.0	35.96	105.0
89.34	67.0	53.15	69.0	34.12	105.9
83.54	61.0	50.70	77.0	30.61	109.2
79.87	57.9	51.61	84.0	26.52	112.1
71.41	46.5	45.02	91.0	22.73	115.0
66.78	37.0	41.85	97.0	19.20	118.0
64.81	30.0	39.81	100.0	0	132.0
59.67	18.0	37.86	102.0		

Urea (CH_4ON_2) + Cinnamic acid ($\text{C}_9\text{H}_8\text{O}_2$)

Kremann, Weber and Zechner, 1925

%	f. t.	E	%	f. t.	E
0.0	131.0	-	50.1	117.5	90
9.0	129.0	-	52.7	116.5	-
15.6	128.2	-	61.0	110.1	-
25.6	126.5	-	67.8	100	90
37.0	123	-	75.3	100	-
44.4	120	-	86.3	118	-
45.4	119.5	-	100.0	133	-

Urea (CH_4ON_2) + Sarcomelanin acid

Adler, 1932

%	f. t.
0	132
10-50	118.5

Urea (CH_4ON_2) + Benzomelanin acid

Adler, 1932

%	f. t.	%	f. t.
0	132	40	102.5
10	111.5	50	102.5
20	111	60	102
30	102.5		

Urea (CH_4ON_2) + Sepiamelanin acid

Adler, 1932

%	f. t.
0	132
10-50	120

Urea (CH_4ON_2) + Aminobenzoic acid.Melanin acid

Adler, 1932

%	f.t.	%	f.t.
0	132	30	111.5
10	111.5	40	111.5
20	111.5	50	111.5

Urea (CH_4ON_2) + Humic acid

Adler, 1932

%	f.t.	%	f.t.
0	132	30	128
10	128	40	128
20	128	50	128.5

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Pushin and Rikovski, 1932

mol%	f.t.	E	mol%	f.t.	E
100	17	-	60	-8	-15
90	10	-23	50	+6	-16
80	0.5	-19	35	20.5	-18
70	-9	-17	20	35	-21
35	-15	-15	0	48.5	-

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Stearic acid ($\text{C}_{18}\text{H}_{36}\text{O}_2$)

Eykman, 1889

%	D f.t.	%	D f.t.
1.055	-0.48	14.29	5.44
2.242	1.07	18.87	6.79
5.084	2.21		

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Chloracetic acid ($\text{C}_2\text{H}_3\text{O}_2\text{Cl}$)

Pushin and Rikovski, 1932

mol %	f.t.	E	mol %	f.t.	E
100	61.5	-	40	22.0	18.5
90	54	16	35	19.5	18.5
80	46	17.5	33	18.5	18.5
70	35	19	30	22	18.5
60	21.5	21.5	20	33	17
55	23.0	20	10	41	14
50	24.0	- (1+1)	0	48.5	-
45	23.0	13			

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Dichloroacetic acid($\text{C}_2\text{H}_2\text{O}_2\text{Cl}_2$)

Pushin and Rikovski, 1932

mol %	f.t.	E	mol %	f.t.	E
100	+11	-	45	-10	-13
90	+ 5.5	-32	43	-11.5	-11.5
80	- 6	-26	40	- 2.5	-11.5
70	-25	-25	30	+18.5	-11.5
60	-14.5	-30	15	+37.5	-15
55	-10	-32	0	+48.5	-
50	- 7	- (1+1)			

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Trichloroacetic acid($\text{C}_2\text{HO}_2\text{Cl}_3$)

Pushin and Rikovski, 1932

mol %	f.t.	E	mol %	f.t.	E
100	57	-	45	31.5	-
90	49	5	42	29	10
80	35	8.5	30	19	16
70	9	9	20	34.5	10
65	18	9	10	24	-
50	29	- (1+1)	0	48.5	-

Urethane ($\text{C}_3\text{H}_7\text{O}_2\text{N}$) + Benzoic acid ($\text{C}_7\text{H}_6\text{O}_2$)

Pushin and Wilowitsch, 1925 (fig.)

mol%	f.t.	mol%	f.t.
100	121	40	60
90	114	30	40
80	107	25	31 E
70	97	20	35
60	87	10	42
50	75	0	48

Sec. Acetylbutylamine 1 ($\text{C}_6\text{H}_{13}\text{ON}$) + Acetic acid($\text{C}_2\text{H}_4\text{O}_2$)

Baldwin, 1937 34.40 g/100 cc acid

w.l.	(α)	w.l.	(α)	w.l.	(α)
20°					
6708	-13.21	4132	-37.92	4811	-27.52
6362	-14.72	4044	-40.81	4720	-28.62
5893	-17.30	3845	-46.09	4640	-29.50
5780	-18.17	3713	-49.06	4565	-30.68
5536	-19.97	3623	-53.1	4463	-32.12
5219	-22.66	3550	-56.1	4358	-34.10
5106	-23.89	3410	-62.1	4220	-36.50
4912	-26.00	6497	-14.10	4085	-39.40
4722	-28.51	6104	-16.08	3951	-43.13
4680	-29.50	5782	-18.10	3759	-48.65
4602	-30.39	5700	-18.66	3674	-51.36
4554	-31.39	5461	-20.50	3605	-53.91
3290	-33.60	5153	-23.26	3484	-59.1
4316	-35.07	4934	-25.70	3290	-68.0

Benzamide (C_7H_7ON) + Acetic acid ($C_2H_4O_2$)

Kremann, Mauermann and Oswald, 1923

%	f.t.	E	%	f.t.	E
0	126.5	-	47.41	47	-2
4.93	120	-	47.69	46.	"
9.42	114	-	53.92	36.5	"
13.48	109	-	56.13	31.5	"
17.20	103	-	62.29	15	"
21.09	96	-	63.83	15.5	"
23.75	92.5	-	70.15	3.0	-
29.35	82	-	76.15	3.0	-
34.17	72	-	84.00	8.6	-
38.39	65	-2	92.57	13	-
42.08	58	"	100	17	-
45.37	51	"			

Benzamide (C_7H_7ON) + Palmitic acid ($C_{16}H_{32}O_2$)

Magne, Hughes and al., 1952

mol%	f.t.	mol%	f.t.
100	62.5	78.14	71.4
95.02	61.9	64.14	90.5
88.56	60.9	50.48	104.4
86.01	60.2	32.11	115.3
		0	126.6
E : 84.8 mol%		60.0°	

Benzamide (C_7H_7ON) + Benzoic acid ($C_7H_6O_2$)

Kremann, Mauermann and Oswald, 1923

mol%	f.t.	mol%	f.t.
0.0	124.0	50.2	81.0
5.3	120.0	51.9	82.3
11.5	116.0	53.8	83.8
16.1	111.6	57.2	86.8
22.0	106.0	60.4	90.5
27.8	100.0	63.4	93.2
33.3	94.0	68.5	98.5
37.3	88.0	74.5	104.0
43.7	81.8	79.0	107.5
44.8	79.5	86.7	112.5
48.1	79.5	93.7	116.6
49.1	80.0	100.0	121.0

E = 79.5°

Benzamide (C_7H_7ON) + Salicylic acid ($C_7H_6O_3$)

Kremann and Auer, 1918

%	f.t.	%	f.t.
0	124.8	46.4	114.8
5.8	121.0	48.2	115.0
10.1	117.3	50.1	115.9
14.3	114.6	52.2	115.9
20.6	109.0	53.3	116.0
24.1	106.0	53.6	116.0
26.0	107.0	58.2	115.7
29.5	108.0	63.2	115.0
33.9	108.3	64.4	114.5
34.5	108.5	67.5	121.2
37.6	110.1	71.8	130.0
40.3	112.0	76.2	135.0
42.2	112.4	83.5	143.2
43.5	113.5	92.3	151.0
44.9	114.0	100	157.0

(2+1) (1+1)

Benzamide (C_7H_7ON) + m-Oxybenzoic acid ($C_7H_6O_3$)

Kremann and Auer, 1918

%	f.t.	E	%	f.t.	E
0	124.8	-	44.2	105.0	-
6.4	120.0	-	48.5	119.0	81.4
10.2	117.0	-	50.5	125.5	-
15.5	111.5	-	52.9	131.0	-
20.8	104.0	-	54.5	134.8	-
26.5	95.0	-	57.3	140.2	-
28.5	91.0	79.3	57.5	140.5	-
31.1	85.8	79.1	60.3	145.4	-
32.0	84.0	-	63.0	151.5	-
34.5	80.0	79.0	69.7	161.5	-
36.1	79.6	-	76.1	170.5	-
37.3	80.5	-	84.9	179.0	-
39.0	86.5	81.0	92.5	186.5	-
40.4	92.0	-	100	193.0	-
43.2	101.4	81.2			

(1+1)

Benzamide (C_7H_7ON) + p-Oxybenzoic acid
($C_7H_6O_3$)

Kremann and Auer, 1918

%	f.t.	E	%	f.t.	E
0	124.8	-	32.2	80.3	-
6.5	120.0	-	33.5	80.1	-
11.0	116.5	-	37.4	77.0	74.5
15.0	112.0	-	39.2	76.0	74.0
17.4	110.2	-	41.2	82.5	-
19.0	108.0	-	43.1	90.1	74.3
22.7	101.5	-	49.6	106.5	-
24.1	99.0	-	54.1	119	74.9
25.8	95.5	79.8	59.8	134	-
26.9	93.0	-	65.5	147	-
28.9	86.2	79.8	72.6	162	-
29.8	83.6	80.0	100	210	-

(3+1)

Acetanilide (C_8H_9ON) + Benzoic acid ($C_7H_6O_2$)

Pushin and Wilowitsch, 1925 (fig.)

mol%	f.t.	mol%	f.t.
100	121	40	76 E
90	116	30	87
80	100	20	96
60	93	10	106
50	84	0	115

Hrynakowski and Adamanis, 1933

mol%	f.t.	mol%	f.t.
100	121.4	47.5	82.5
95.5	118.9	42.4	76.0 E
90.9	116.0	37.3	84.0
86.2	113.0	32.2	89.0
81.6	110.5	26.9	94.0
76.8	108.0	21.7	99.0
72.1	104.0	16.3	102.0
67.3	100.0	10.9	107.0
62.4	95.0	5.5	109.0
57.5	90.0	0	112.0
52.5	86.5		

Acetanilide (C_8H_9ON) + Aspirin ($C_9H_8O_4$)

Lacourt, 1952

%	f.t.	E
0	115	-
10	110	82
20	104	82-83
30	97	82-83
35	93.3	82
40	86.4	81.5-82
45	87.7	82-83
50	95	82-83
60	107.5	82
70	114.4	82
80	124.2	82-83
90	133	82
100	137.5-138	-

Phenylacetamide (C_8H_9ON) + Palmitic acid ($C_{16}H_{32}O_2$)

Magne, Hughes and al., 1952

mol%	f.t.	mol%	f.t.
100	62.5	50.09	132.3
96.87	62.2	33.05	144.3
93.17	64.0	20.16	150.3
79.84	98.0	0	158.5
64.12	119.1		

E : 93.8 mol% 61.9°

Phenoxyacetamide ($C_8H_9O_2N$) + Palmitic acid ($C_{16}H_{32}O_2$)

Magne, Hughes and al., 1952

mol%	f.t.	mol%	f.t.
100	62.5	50.05	82.6
90.08	61.2	39.89	88.6
79.86	59.6	30.26	92.5
69.47	67.4	14.69	97.5
59.83	75.4	0	101.6

E : 78.4 mol% 59.4°

Benzanilide ($C_{13}H_{11}ON$) + Benzoic acid ($C_7H_6O_2$)

Pushin and Wilowitsch, 1925 (fig.)

mol%	f.t.	mol%	f.t.
100	121	50	131
90	117	40	138
80	111	30	145
75	109 E	20	150
70	114	10	157
60	123	0	162

Ethyl p-aminobenzoate ($C_9H_{11}O_2N$) + Benzoic acid ($C_7H_6O_2$)

A. and L. Kofler, 1948

E : 29 % 71°

pp'-Tetramethyldiamino-benzophenone ($C_{17}H_{20}ON_2$)
+ Phenylacetic acid ($C_8H_8O_2$)

Pfeiffer, 1885

%	f.t.	%	f.t.
0	172	67.5	60
12.7	157	76.5	67
24.4	140	86.7	72
39.2	117-118	94.5	75
52.3	92	100	76

pp'-Tetramethyldiamino-benzophenone ($C_{17}H_{20}ON_2$)
+ m-Oxybenzoic acid ($C_7H_6O_3$)

Pfeiffer, 1885

%	f.t.	%	f.t.
0	172	43.3	149
11.1	165	50	159
20	151	61.5	176
28.9	127	71.7	184
34.7	134	100	199

pp'-Tetramethyldiamino-benzophenone ($C_{17}H_{20}ON_2$)
+ 1-Naphthoic acid ($C_{10}H_8O_2$)

Pfeiffer, 1885

%	f.t.	%	f.t.
100	160	53.8	127
96.5	158.5	46.6	119-120
90.3	156	38.9	117
87.5	155	29.8	137
77.8	150-151	18.4	151
70	146	7.0	166
63.6	139	0	172
62.2	137		

Antipyrine ($C_{11}H_{12}ON_2$) + Succinic acid ($C_4H_6O_4$)

Regenbogen, 1918

%	mol%	f.t.	%	mol%	f.t.
100	100	177.1	42.4	54.0	118
90	97.5	174.3	38.6	50.0	100
80	86.4	169.6	34.2	45.3	80
70	78.8	164.5	32.6	43.5	71
63.9	73.9	160	27.7	38.0	-
59.1	69.7	153	20	28.5	64
54.0	65.1	147	10	15.0	93
48.8	60.3	137	0	0.0	108.2

Antipyrine ($C_{11}H_{12}ON_2$) + Palmitic acid ($C_{16}H_{32}O_2$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	63	-	46.8	86	46.2
90	59	-	40.3	93.5	46.3
80	53	-	30	108	-
70	48.5	-	20	"	-
61.8	56	45.8	10	"	-
57.7	64.5	46.0	0	"	-
54.1	74	46.0			

Antipyrine ($C_{11}H_{12}ON_2$) + Dimethylglycolic acid
($C_4H_8O_3$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	77	-	39.3	59.0	-
90	74	-	35.6	60.4	-
80	67.5	-	32.3	59.2	-
70	57.5	-	27.4	58.5	-
63.7	50	38.5	21.7	74	56.8
58.5	42	38.5	16.5	86	57.0
52.4	44	-	10	99	57.0
48.6	50	38.0	0	108.2	-
42.8	57.5	-			

(1+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Dioxystearic acid
($C_{18}H_{36}O_4$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	121	-	50.8	90	82
90	116.5	-	47.4	85.3	82
82.8	112.5	-	38.8	86	82.5
77.1	109.0	-	33.3	89	82.3
71.7	105.3	-	27.7	94	82.8
66.5	101	-	20	98	81.2
62.7	98.0	78.2	10	104	-
59.0	94	-	0	108.2	-
55.0	90.9	81			

Antipyrine ($C_{11}H_{12}ON_2$) + Chloracetic acid
($C_2H_3O_2Cl$)

Regenbogen, 1918

%	f.t.	%	f.t.	E
100	60.8	33.5	50.4	-
92.6	58.0	33.5	-	-
83.3	50.8	31.7	50.0	45.7
75.8	40	30	48.2	-
70.4	28.0	29.8	42	-
67.6	21.0	24.9	60	-
59.5	-	20.1	75.5	-
48.3	32	14.7	87.5	-
44.6	40	7.4	101.5	-
40.8	45	0	108.2	-
37.1	48.5			

Antipyrine ($C_{11}H_{12}ON_2$) + Camphoric acid
($C_{10}H_{16}O_4$)

Regenbogen, 1918

%	f.t.	%	f.t.	E
100	185	28.7	83.2	-
90	171	27.7	62	-
80	153	24.6	-	82
74.1	142	21.6	85	81
69.0	125	20	86	-
63.2	110	10	101	-
57.1	80	0	108.2	-
54.5-70.0	-			

(1+1) (2+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Benzoic acid ($C_7H_6O_2$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	120	-	40	56	-
90	115	-	35	52.9	-
80	109.8	-	32.5	51.5	-
70	99.5	-	30	-	52
60	84	47	20	82.5	-
50	-	49.5	10	98	-
45	51.9	-	0	108.2	-

(1+1)

Kremann and Marktl, 1920

%	f.t.	E	%	f.t.	E
0	109.1	-	45.8	63.3	-
5.7	103.5	-	48.6	61.0	-
13.9	92.6	-	49.1	59.7	-
16.5	89.2	-	52.7	65.8	57.8
22.3	79.5	-	56.3	75.0	-
25.1	75.0	58.0	57.7	78.2	54.0
28.3	67.1	-	62.4	90.0	-
31.7	59.5	59.5	67.8	98.8	-
36.1	65.5	-	76.1	107.5	-
38.7	67.2	-	84.0	113.2	-
40.0	67.18	-	93.5	118.1	-
42.9	66.5	-	100	121.0	-

(1+1)

Hrynakowski, 1934

E_1 : 49.0% 61.5° E_2 : 31.7% 63.0°

Hrynakowski and Adamanis, 1935

mol%	f.t.	E	min
100	121.4	-	-
96.7	120.0	-	-
93.3	119.0	-	-
89.7	115.0	-	-
86.0	113.0	-	-
82.2	109.0	61.0	0.75
78.2	104.0	60.5	1.0
74.1	101.0	61.0	1.25
69.8	91.0	61.5	1.25
65.3	77.0	"	2.0
61.6	61.5	"	-
60.6	65.0	61.0	2.25
55.8	69.0	-	-
50.7	70.0	-	-
50.0	71.0	-	-
45.3	69.0	61.5	0.75
42.0	63.0	63.0	-
39.8	66.0	62.5	2.75
33.9	79.0	63.0	2.25
27.8	91.0	62.0	1.75
21.4	98.0	62.0	1.25
14.6	105.0	63.0	0.75
7.5	108.0	63.0	0.5
0	112	-	-

(1+1)

Antipyrine ($C_{11}H_{12}ON_2$) + Salicylic acid
($C_7H_6O_3$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	154.9	-	35.0	86	-
90.0	151.5	-	32.5	81	-
80.0	143	-	30.0	80	75.8
70.0	133	75	20.0	88	-
60.0	102	75.9	10.0	99.3	-
50.0	85	-	0	108.5	-
40.0	88.8	-			

(1+1)

Kremann and Haas, 1919

%	f.t.	E	%	f.t.	E
0	109.8	-	49.6	82	-
4.2	105.8	-	50.8	79	-
8.1	101.5	-	51.5	79	72
18.6	86	72	54.8	73.5	-
25.1	74	72	57.1	83.5	-
28.7	74.8(1+1)	-	60.5	99	-
31.4	78.8	"	65.3	113.5	-
33.6	81	"	71.2	129	-
36.4	84.8	"	77.0	139	-
38.1	87.1	"	80.7	144	-
41.9	89	"	86.3	148	-
45.0	88.7	"	100	155	-
47.5	86	"			

Hrynakowski, and Adamanis, 1935

mol%	f.t.	E	min.
100	155	-	-
96.3	153.0	-	-
92.5	150.0	-	-
88.5	148.0	-	-
84.5	146.0	-	-
80.3	140.5	75.0	3.5
76.1	129.0	73.0	3.75
71.7	118.0	75.0	4.5
67.1	94.0	74.5	5.0
62.5	75.0	75.0	5.75
57.6	85.0	74.0	1.5
52.7	89.0	-	-
50	90.0	-	-
47.6	89.0	-	-
42.3	82.0	72.0	1.5
36.9	78.0	72.0	3.0
34.6	72.0	72.0	-
31.2	75.0	71.5	2.75
25.4	80.0	71.0	2.0
19.4	85.0	-	-
13.1	92.0	-	-
6.7	102.5	-	-
0	112	-	-

(1+1)

Hrynakowski, 1934

 E_1 : 54.5% 75.0° E_2 : 27.5% 72.0°Antipyrine ($C_{11}H_{12}ON_2$) + m-Oxybenzoic acid
($C_7H_6O_3$)

Regenbogen, 1918

%	f.t.	%	f.t.
100	196.0	55.6	127
90	190.8	51.7	106
80	181	48.4-24.0	-
70	166	20	75
64	156	10	95
60	141	0	108.0

Antipyrine ($C_{11}H_{12}ON_2$) + p-Oxybenzoic acid
($C_7H_6O_3$)

Regenbogen, 1918

%	f.t.	%	f.t.	E
100	205.3	33.3	93.5	93.5
66.7°	168	30	100.0	-
60	155	26.8	102.7	-
55.2	132	24.1	100.0	-
52.4	110	20	93	88.0
50	83	10	95.0	-
40	75	0	108.0	-
36.8	87			

(1+2)

Antipyrine ($C_{11}H_{12}ON_2$) + Anisic acid ($C_8H_8O_3$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	177.8	-	42.0	102	66.7
90	174.0	-	38.6	91	-
80	168.0	-	34.6	70	66.0
70	161	-	30	74	65.8
65.6	155	-	24.8	84	65.7
61.8	151	-	18.7	92	65.3
58.2	143.5	-	11.8	99.5	-
51.0	130	64.1	6.3	103	-
47.6	121	65	0	108.0	-
44.7	111	65.1			

Antipyrine ($C_{11}H_{12}ON_2$) + Aspirin ($C_9H_8O_4$)

Regenbogen, 1918

%	f.t.	%	f.t.
70	95	44.5	60
61.4	45	40.8	55
56.5	52	38.6	55
56.8	22	30	81
52.6	61	20	94
46.8	30	10	104.5
48.9	65	0	108.0
45.2	63		
(1+1)			

Antipyrine ($C_{11}H_{12}ON_2$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	141.8	-	47.0	103.7	-
90	134.0	-	44.0	101.5	-
80	119	69.0	40	97	-
74.1	103	71.0	35.3	93	-
68.4	86.5	72.7	30.8	90	-
64.0	80	-	25.9	84	83.2
60	84	-	20	91	83.2
53.6	97	-	10	100	82.5
50	102.3	-	0	108.2	-
(1+1)					

Antipyrine ($C_{11}H_{12}ON_2$) + p-Nitrobenzoic acid
($C_7H_5O_4N$)

Regenbogen, 1913

%	f.t.	E	%	f.t.	E
100	231	-	44.0	109.6	-
90	224	-	40.0	106	-
80	216	-	35.3	102	87.0
74.1	205	-	30.8	98	87.5
68.4	195	-	25.9	90	87.8
64.0	180	-	20.0	90	87.2
60.0	166	108.5	15.3	94	-
53.6	146	109.2	10.0	100.0	-
50.0	110.3	-	5.8	103.7	-
47.0	111.0	-	0	108.2	-
(1+1)					

Antipyrine ($C_{11}H_{12}ON_2$) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Regenbogen, 1918

%	f.t.	E	%	f.t.	E
100	137.5	-	47.0	95.0	-
90	129	-	44.0	94	-
80	116	67	40.0	92	-
74.1	103.5	-	35.3	86.5	79.8
68.4	91	64	30.8	80	80.0
64.0	74	65	25.9	86.5	79.5
60	80	-	20	92.5	-
53.6	90	-	10	101	-
50.0	92.3	-	0	108.2	-
(1+1)					

Pyramidon ($C_{13}H_{17}ON_3$) + Benzoic acid ($C_7H_6O_2$)
Regenbogen, 1918

%	f.t.	%	f.t.
100	119.7	37.3	56.5
90.0	115.0	34.6	58.0
80.0	108.5	32.4	57.7
70.0	98.5	30.0	56
60.0	84	24.9	68
56.5	75	20.9	76.5
53.1	62	16.7	83
50.0	51.7	11.8	88.5
46.4	51.7	6.3	95.7
43.4	50.0	0	102.0
40.0	53.8		

Pyramidon ($C_{13}H_{17}ON_3$) + Salicylic acid ($C_7H_6O_3$)
Regenbogen, 1918

%	f.t.	%	f.t.
100	154.7	37.5	53
90.0	149.2	37.4	55
80.0	141.5	34.1	61.2
70.0	115	32.9	63.8
63.6	90	27.7	71.3
60.0	2	20.0	80
59.0-47.8	-	13.0	90
41.3	45.9	6.3	96.8
		0	103.0

Krupatkin, 1956

%	f.t.	%	f.t.
0.0	108.0	50.0	84.0
5.0	104.0	51.5	82.0 E
10.0	98.0	52.0	83.0
15.0	91.0	55.0	90.0
18.0	87.0 E	60.0	93.0
20.0	88.0	63.0	93.5 tr.t.
25.0	91.0	64.0	99.0
28.0	93.0	64.2	94.0 (1+3)
30.0	94.0	65.0	103.0
35.0	97.0	66.0	107.0
37.4	97.0 (1+1)	68.0	116.0
39.0	96.5	70.0	124.0
40.0	95.0	75.0	134.0
43.0	92.0	80.0	142.0
45.0	90.0	90.0	152.0
		100.0	155.0

Pyramidon ($C_{13}H_{17}ON_3$) + Anisic acid ($C_8H_8O_3$)

Regenbogen, 1918

%	f. t.	E
100	177.8	-
60.0	153	-
56.8	150	-
53.3	142	-
48.2	132	-
42.9	122	75
40.0	115	-
35.2	102.5	77
30.8	90	-
27.3	81	78.8
25.0	-	78.8
19.4	87	-
13.8	89	-
7.4	97	79.5
0	103	-

Pyramidon ($C_{13}H_{17}ON_3$) + Sepiamelanin acid

Adler, 1932

%	f. t.
0	108
10-50	105

Pyramidon ($C_{13}H_{17}ON_3$) + Sarcomelanin acid

Adler, 1932

%	f. t.
0	108
10-50	105

Pyramidon ($C_{13}H_{17}ON_3$) + Benzomelanin acid

Adler, 1932

%	f. t.	%	f. t.
0	108	30	103
10	104°	40	103.5
20	103.5	50	103.5

Pyramidon ($C_{13}H_{17}ON_3$) + Aminobenzoic acid .
Melanin acid

Adler, 1932

%	f. t.	%	f. t.
0	108	30	99.5
10	99.5	40	99.5
20	99.5	50	99

Pyramidon ($C_{13}H_{17}ON_3$) + Humic acid

Adler, 1932

%	f. t.	%	f. t.
0	108	40	103
10	103.5	50	103
20	103	60	103.5
30	103		

p-Azoxyanisole ($C_{14}H_{14}O_3N_2$) + Anisic acid
($C_8H_8O_3$)

Dave and Dewar, 1954 (fig.)

mol%	f. t.	clearing point
100	184	-
80	170	-
60	156	-
40	140	-
30	127	-
28	124	124
17	112 E	124
10	115	125
0	118	136

p-Azoxyanisole ($C_{14}H_{14}O_3N_2$) + Methoxycinnamic
acid ($C_{10}H_{10}O_3$)

de Kock, 1904

mol%	clearing point	f. t.	E
0	135.2	114.0	-
10.4	130.4-130.8	111.6	105.4
20	134.4-135.0	107.8	-
26.7	136.9-137.6	111.7	107.4
30.3	139.7-140.8	114.7	107.2
40.3	146.5-147.9	128.0	107.6
59.2	158.1-159.3	142.9	107.6
80.1	172.6-173.8	157.8	108
95	183.2-183.8	166.6	-
100	185.5	170.6	-

p-Azoxyphenetole ($C_{16}H_{13}O_3N_2$)
+ p-Methoxycinnamic acid ($C_{10}H_9O_3$)

Prins, 1910

mol%	f. t.	clearing point beginn. end	m. t.
100	167.2	167.3 -	138.4
90	159.0	160.0 125.8	135.8
80	158.2	158.4 125.6	132.2
70	158.8	159.5 125.6	127.0
67	159.0	160.2 125.2	127.2
65	159.3	160.5 125.6	128.0
60	160.2	162.0 125.2	132.0
30	171.2	173.6 125.0	155.0
10	182.2	183.8 -	166.8
0	188.0	188.3 -	173.8

l-Acetylpyrrole (C_6H_7ON) + Acetic acid ($C_2H_4O_2$)

Magnanini, 1889

%	f. t.	%	f. t.
100	16.44	93.3066	14.225
99.6683	16.325	91.5322	13.65
98.6490	15.97	86.9788	12.24
97.0246	15.44	84.9450	11.60

Phenylmethylpyrazolone ($C_{10}H_{10}ON_2$)
+ Salicylic acid ($C_7H_6O_3$)

Regenbogen, 1918

%	f. t.	%	f. t.
100	155.0	47.7	105
90.0	150.0	44.2	93
80	144.0	40.2	81
71.4	138.0	38.6	58
66.3	135	30.0	70
60.0	128.5	20.0	102
55.2	120	10.0	111.5
50.0	109	0.0	121.0

2,4-Dimethyl-5-carbethoxy pyrrole ($C_9H_{13}O_2N$)
+ Chloracetic acid ($C_2H_3O_2Cl$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	60	74
10	116	70	61
20	110	80	49 E
30	103.5	90	57.6
40	96	100	62.5
50	87.5		

2,4-Dimethyl-5-carbethoxy pyrrole ($C_9H_{13}O_2N$)
+ Benzoic acid ($C_7H_6O_2$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	60	84 E
10	118	70	94
20	111	80	104
30	105.5	90	113
40	99	100	121
50	91		

2,4-Dimethyl-5-carbethoxy pyrrole ($C_9H_{13}O_2N$)
+ Salicylic acid ($C_7H_6O_3$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	123	60	120
10	116.5	70	131.5
20	109	80	141
30	102.5	90	149
40	94.5 E	100	155
50	107		

2,4-Dimethyl-carbethoxy-3-aldehyde pyrrole
($C_{10}H_{13}O_3N$)
+ Chloracetic acid ($C_2H_3O_2Cl$)

Dezelic, 1935

mol%	f. t.	mol%	f. t.
0	143	60	74.5 tr. t.
10	135	70	72
20	127	80	63.5
30	117.5	86	51 E
40	107.5	90	55
50	93	100	61

(1+1)

2,4-Dimethyl-5-carbethoxy-3-aldehyde-pyrrole
($C_{10}H_{13}O_3N$) + Benzoic acid ($C_7H_6O_2$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	143	60	88
10	137	63	86 E
20	130	70	94
30	122	80	104
40	111.5	90	113
50	100	100	121

2,4-Dimethyl-5-carbethoxy-3-aldehyde-pyrrole
($C_{10}H_{13}O_3N$) + Salicylic acid ($C_7H_6O_3$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	143	50	135 (1+1)
10	135	60	133.5
20	127.5	70	128 E
27	123 E	80	139
30	125	90	148
40	132	100	155

2,5-Dimethyl-3-carbethoxy-4-aldehyde-pyrrole
($C_{10}H_{13}O_3N$) + Salicylic acid ($C_7H_6O_3$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	150	50	111.5
10	140.5	57.5	109 E
20	133	60	116
30	120 tr.t.	70	131
36	111	80	141
40	110	90	149
42	109 E	100	155
(1+1)	(2+1)		

2,4-Dimethyl-3-acetyl-5-carbethoxy-pyrrole
($C_{11}H_{15}O_3N$) + Acetic acid ($C_2H_4O_2$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	141	60	97
10	137.5	70	80.5
20	131	80	64
30	126	90	38
40	118.5	100	10
50	108.5		

2,4-Dimethyl-3-acetyl-5-carbethoxy-pyrrole
($C_{11}H_{15}O_3N$) + Succinic acid ($C_4H_6O_4$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	141	50	152
10	138	60	162.5
20	131	70	168
25	126.5 E	80	173
30	131	90	178
40	141.5	100	183

2,4-Dimethyl-3-acetyl-5-carbethoxy pyrrole
($C_{11}H_{15}O_3N$) + Chloracetic acid ($C_2H_3O_2Cl$)

Dezelic, 1935

mol%	f.t.	E	min.
0	141	-	-
10	135	66	0.4
20	128	69	0.7
30	120	75	1
40	109.5	85	1.1
45	102	83	1.4
50	92.5	85.3	1.5
55	85.5	85	1.7
60	87	85.5	-
70	76	49	-
80	64	50	1
85	60	50	2
88	55.5	51.2	2.6
90	53.5	51.6	3.2
95	58	51.9	3.8
100	63	47.5	1.7 (1+1)

2,4-Dimethyl-3-acetyl-5-carbethoxy pyrrole
($C_{11}H_{15}O_3N$) + Benzoic acid ($C_7H_6O_2$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	141	60	91
10	138	63	87.5 E
20	131	70	95
30	123	80	105.5
40	114.5	90	114.5
50	105	100	121

2,4-Dimethyl-3-acetyl-5-carbethoxy pyrrole
($C_{11}H_{15}O_3N$) + Salicylic acid ($C_7H_6O_3$)

Dezelic, 1935

mol%	f.t.	mol%	f.t.
0	141	58	106
10	136	60	109
20	128.5	70	127
30	123	80	140
38	113	90	149
50	107	100	155

(1+1) (2+1)

Nicotinamide ($C_6H_6ON_2$) + Palmitic acid ($C_{16}H_{32}O_2$)

L and A Kofler, 1943

E : 60° complex : tr.tI = 78° tr.tII = 76°

Nicotinamide ($C_6H_6ON_2$) + Stearic acid ($C_{18}H_{36}O_2$)

L and A Kofler, 1943

%	f.t.
0	129
-	60 E
100	69

complex : tr.tI = 84° tr.tII = 31°

Nicotinamide ($C_6H_6ON_2$) + Glutaric acid ($C_5H_8O_4$)

L and A Kofler, 1943

%	f.t.
0	129
E	112
complex	136
E	91
100	99

Nicotinamide ($C_6H_6ON_2$) + Adipic acid ($C_6H_{10}O_4$)

L and A Kofler, 1943

%	f.t.
0	129
E	118
complex	130
E	123
complex	124
E	121
100	152

Nicotinamide ($C_6H_6ON_2$) + Suberic acid ($C_8H_{14}O_4$)

L and A Kofler, 1943

%	f.t.
0	129
25	111 E(2+1)+A
30	107 E(1+1)+A
(2+1)	115
43	114, 5E(2+1)+(1+1)
(1+1)	121
63	118 E(1+1)+B
85	131 tr.t.
100	141

Nicotinamide ($C_6H_6ON_2$) + Azelaic acid ($C_9H_{16}O_4$)

L and A Kofler, 1943

%	f.t.	%	f.t.
0	129	88	98 E
35	102 E	100	108
(1+1)	113		

Nicotinamide ($C_6H_6ON_2$) + Sebacic acid ($C_{10}H_{18}O_4$)

L and A Kofler, 1943

%	f.t.	%	f.t.
0	129	complex	121
E	113	E	115
complex	118	complex	133
E	116		

Nicotinamide ($C_6H_6ON_2$) + Dodecanedioic acid
($C_{12}H_{22}O_4$)

L and A Kofler, 1943

% stable	f.t.	
	stable	unstable
0	129	-
-	-	111 E (+AII)
-	-	108 E (+AIV)
26	117 E(+ (2+1))	-
33	110 E(+ (1+1))	-
(2+1)	123	-
53	122 E	-
(1+1)	125	-
84	118 E	-
100	129	129

Nicotinamide ($C_6H_6ON_2$) + Hexadecanedioic acid
($C_{16}H_{32}O_4$)

L. and A. Kofler, 1943

%	f.t.
0	129
E	123
complex	132
E	128
complex	129
E	120
complex	126

Nicotinamide ($C_6H_6ON_2$) + Ethyl p-Oxybenzoate
($C_9H_{10}O_3$)

L. and A. Kofler, 1943

%	f.t.
0	129
-	104 E
50	107 (1+1)
-	96 E
100	116

Phenacetin ($C_{10}H_{12}O_2N$) + Benzoic acid ($C_7H_6O_2$)

Kitran, 1924

E : 65.7 mol % f.t. = 86.7°

A. and L. Kofler, 1948

E : 51 % 90°

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Benzoic acid
($C_7H_6O_2$)

Pfeiffer, Angern and al., 1930

%	f.t.	E
0	146	145
20	129	31
31	111	"
40	92	"
46	85	"
50	91	"
60	96 (2+1)	"
70	95	85
74	94	"
80	106	"
90	115	"
100	125	120

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + p-Toluic acid
($C_8H_8O_2$)

Pfeiffer, Angern and al., 1930

%	f.t.	E
0	146	145
20	136	100
30	127	"
35	121	"
41	108	"
45	105	"
50	107 (1+1)	104
55	106	"
60	123	"
70	149	"
80	162	"
100	178	175

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + p-Oxybenzoic acid ($C_7H_6O_3$)

Pfeiffer, Angern and al., 1930

%	f.t.	E
0	146.5	144
8	140	128
15	134	128.5
22	141	128.8
30	146.5	128.8
40	151 (1+1)	129
43	160	130.5
50	175	148
60	186	151
66	187 (1+2)	152
72	185.1	179
80	189.5	"
88	201	"
100	210	209

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + o-Methoxybenzoic acid ($C_8H_8O_3$)

Pfeiffer, Angern and al., 1930

%	f.t.	E
0	146	145
20	133.5	86
31	124	"
40	114	"
45	107	"
50	100	"
55	89.5	"
60	89	"
65	91	"
70	92 (1+2)	87
75	91	86
80	89	"
85	90	"
90	95	"
100	98	95

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + p-Methoxybenzoic acid ($C_8H_8O_3$)

Pfeiffer, Angern and al., 1930

%	f.t.	E	%	f.t.	E
0	146.5	145	50	115	110
20	134	110	60	137	"
30	124	"	70	154	112
40	112	"	80	166	"
44	112.5	"	100	184	182
46	113	"			

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + m-Aminobenzoic acid ($C_7H_7O_2N$)

Pfeiffer, Angern and Wang, 1927

%	f.t.	E	%	f.t.	E
0	146	144	51	115.5	112
10	139	103	60	120	109
20	126	"	70	143	"
30	109	"	80	158	"
40	113	"	100	174	170
49	116	114			

(1+1)

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + p-Aminobenzoic acid ($C_7H_7O_2N$)

Pfeiffer, Angern and Wang, 1927

%	f.t.	E	%	f.t.	E
0	146	144	55	142	138
10	138.5	118.5	60	139.5	135
20	125	118.5	70	142.5	"
30	129	119	80	164	"
40	139	118	90	178	"
45	142	119	100	185	182
49	143	139			

(1+1)

Sarcosin anhydride ($C_6H_{10}O_2N_2$) + Anthranilic acid ($C_7H_7O_2N$)

Pfeiffer, Angern and Wang, 1927

%	f.t.	E	%	f.t.	E
0	146	144	66	123	121
20	130.5	106	70	121.5	117.5
40	108.5	106	75	119	"
50	112	105.5	85	133	"
55	118	"	100	144	142
60	122	"			

(1+2)

Sarcosin anhydride ($C_6H_{10}O_2N_2$)
+ p-Methylaminobenzoic acid ($C_8H_9O_2N$)

Pfeiffer, Angern and Wang, 1927

%	f.t.	%	f.t.
0	146.5	55	145
8	139.5	60	142.5
14	134	65	139
20	128	68	137.5
25	130	72	130.5
30	135.8	78	132.7
35	140.2	84	139.8
40	142.8	90	146
48	145.5	100	156

(1+1)

Sarcosin anhydride ($C_6H_{10}O_2N_2$)
+ p-Dimethylaminobenzoic acid ($C_9H_{11}O_2N$)

Pfeiffer, Angern and Wang, 1927

%	f.t.	E	%	f.t.	E
0	146.5	144	36.5	143	122
15	136.8	122	42	159	"
22	130	121.8	54	184.8	"
28	126	122	70	207	121.7
34	128.8	122	100	235	233

Caprolactam ($C_6H_{11}ON$) + Palmitic acid ($C_{16}H_{32}O_2$)

van Velden, 1956

mol%	f.t.	mol%	f.t.
0	68.4	40.1	36.4
10.3	64.2	43.1	37.1
17.4	59.9	44.95	37.7
26.8	52.0	45.2	38.1
29.9	48.1	48.95	41.3
31.3	46.5	59.75	49.3
34.6	41.5	67.1	53.5
36.3	39.1	74.7	56.0
37.75	35.9	83.7	58.4
38.85	36.2	100	62.3

E : 38.0 mol% 35.8°

Caprolactam ($C_6H_{11}ON$) + Adipic acid ($C_6H_{10}O_4$)

van Velden, 1956

mol%	f.t.	mol%	f.t.
0	68.4	29.6	52.2
4.85	66.2	32.0	52.6
7.65	63.3	32.55	52.8
10.6	59.9	33.4	52.9
15.3	53.9	33.7	53.0
18.8	47.7	34.1	55.5
20.1	44.1 E	34.25	57.0
20.2	44.4	34.4	58.1
20.8	45.5	34.6	58.2
23.5	48.9	35.95	63.6
24.8	49.9	37.05	69.1
26.2	51.0	40.2	82.7
27.4	51.2	100	151.8
(2+1)	52.9°		

Caprolactam ($C_6H_{11}ON$) + Pimelic acid ($C_7H_{12}O_4$)

van Velden, 1956

mol%	f.t.	mol%	f.t.
0	68.4	32.7	41.5
3.1	67.8	35.1	41.3
8.4	63.0	37.6	40.8
14.0	55.1	39.75	39.5
19.1	47.0	41.0	39.3
21.5	41.2	42.2	43.2
22.4	39.3	44.1	46.8
23.05	36.5 E	48.3	56.2
23.9	37.1	54.1	66.7
24.5	37.5	59.5	38.8 E
25.2	38.2	60.25	75.7
25.6	38.4	71.2	87.2
28.7	41.0	100	105.3
(2+1)	41.7°		

Caprolactam ($C_6H_{11}ON$) + Benzoic acid ($C_7H_6O_2$)

van Velden, 1956

mol%	f.t.	mol%	f.t.
0	68.4	42.65	31.9
2.7	67.9	44.85	33.1
10.4	61.7	46.7	33.7
15.5	56.5	49.2	34.3
20.8	50.5	50.6	34.1
24.25	45.1	51.1	33.6
26.5	41.4	52.1	33.0
29.1	36.8	52.3	33.4
30.25	35.9	52.7	34.3
31.05	32.6	53.2	37.8
32.5	30.1	53.5	38.3
33.05	29.0	53.8	39.9
34.45	26.3	54.35	41.7
35.1	25.8	44.95	49.1
36.5	27.2	58.2	58.6
37.4	27.4	62.15	69.9
40.0	29.6	64.70	77.3
40.4	30.1	100	122.6

E : 35.0 mol% 25.5°

E : 52.0 mol% 32.3°

(1+1) 34.3°

Allyl isothiocyanate (C_3H_5NS) + Formic acid
(CH_2O_2)

Joukovsky, 1933

wt%	mol%	f.t.	E
100	100	8.5	-
87.9	94.1	6.35	-106.5
31.7	50	6.35	-106.5
13.4	25	6.35	-106.5
6.6	0	-102.5	-

mol%	wt%	sat.t.	mol%	wt%	sat.t.
91.9	84	10.0	57.7	38.8	39.7
89.1	79.1	23.0	52.4	33.8	38.9
88.1	77.5	26.0	42.8	25.8	36.0
83.5	70.1	33.3	21.9	11.5	25.2
81.8	67.7	35.8	13.2	6.6	6.5
72.8	55.4	38.2		T.C.D.	
69.3	61.2	39.1	63.8	45.0	39.8

 Allylphenyl thiourea ($C_{10}H_{12}N_2S$) + Acetic acid
($C_2H_4O_2$)

Shishokin, 1929

mol%	f.t.	mol%	f.t.
0	99	59.18	76.7
10.34	95	68.96	72.5
20.83	91	80.11	65.5
28.11	89	89.50	56.5
41.98	83.5	94.98	43.0
49.77	80.5		

 Allylphenyl thiourea ($C_{10}H_{12}N_2S$) + Trichloroacetic
acid ($C_2HO_2Cl_3$)

Shishokin, 1929

mol%	f.t.
0	99
23.43	81.8
31.34	74.5
40.19	69.0
55.31	50

 Propyl nitrate ($C_3H_7O_3N$) + Acetic acid ($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	110.5	-
20	-	-0.5
23	107.5 Az	-
100	118.1	-

 Isobutyl nitrate ($C_4H_9O_3N$) + Acetic Acid
($C_2H_4O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	123.5	-
50	114.2	-1.0 Az
100	118.1	-

 Isobutyl nitrate ($C_4H_9O_3N$) + Propionic acid
($C_3H_6O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	123.5	-
9	122.0 Az	-
10	-	-0.2
100	141.3	-

Lecat, 1949

 Isoamyl nitrate ($C_5H_{11}O_3N$) (b.t.=149.75) + Acids.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix.
Propionic acid	$C_3H_6O_2$	141.3	59	138.8	-0.3 (85%)
Butyric acid	$C_4H_8O_2$	164.0	12	147.85	-0.5 (10%)
Isobutyric acid	$C_4H_8O_2$	154.6	30	146.2	-0.5 (30%)

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Formic acid (CH_2O_2)

Lecat, 1949

%	b.t.	Dt mix.
0	101.22	-
45.5	97.05 Az	-
56	-	-3.5
100	100.75	-

Joukovsky, 1933

wt%	mol%	f.t.	E
100	100	+8.5	-
70.3	75.8	-2.5	-
57.9	64.6	-8.5	-
29.7	35.9	-23	-34
11.2	14.3	-31.5	-33
0	0	-28.5	-

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	101.22	-
4	101.20 Az	-
16.5	-	-1.6
100	118.1	-

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Caproic acid ($\text{C}_6\text{H}_{12}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.	%	Sat.t.
22.74	-7.20	46.96	-3.50
25.02	-6.20	50.58	-3.65
25.36	-5.85	50.79	-3.65
33.75	-3.85	52.60	-3.80
36.83	-3.55	55.40	-4.20
38.95	-3.45	59.29	-5.25
41.35	-3.40	66.00	-8.05
43.96	-3.40	67.11	-8.30

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Caprylic acid
($\text{C}_8\text{H}_{16}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.	%	Sat.t.
13.15	22.00	42.37	34.85
19.00	29.10	44.32	34.72
24.04	32.55	48.61	36.64
30.89	34.30	54.29	34.05
35.28	34.80	60.78	32.15
40.47	34.85	69.11	27.55

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Pelargonic acid
($\text{C}_9\text{H}_{18}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.	%	Sat.t.
19.71	43.80	42.10	48.55
24.21	46.30	47.41	48.55
29.96	48.05	54.83	47.60
35.14	48.50	59.36	46.55
41.10	48.55	69.28	40.85

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Caprinic acid ($\text{C}_{10}\text{H}_{20}\text{O}_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f.t.	sat.t.	%	f.t.	sat.t.
4.4	20.0	-	20.4	-	50.0
8.6	-	30.0	100	31.24	-
12.5	-	40.0			

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Lauric acid ($\text{C}_{12}\text{H}_{24}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.	%	Sat.t.
13.48	69.10	40.72	78.90
20.18	75.20	42.10	78.80
26.01	77.65	50.44	78.60
33.29	78.70	58.12	76.95
39.34	78.80	68.23	71.85

Hoerr, Sedgwick and Ralston, 1946

%	f.t.	Sat.t.	%	f.t.	Sat.t.
1.1	20.0	-	13.6	-	60.0
2.7	30.0	-	25.4	-	70.0
6.0	-	40.0	100	43.92	-
8.8	-	50.0			

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Myristic acid ($\text{C}_{14}\text{H}_{28}\text{O}_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f.t.	Sat.t.	%	f.t.	Sat.t.
0.7	20.0	-	6.6	-	60.0
1.3	30.0	-	10.0	-	70.0
2.2	40.0	-	16.1	-	80.0
4.5	-	50.0	100	54.15	-

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Palmitic acid ($\text{C}_{16}\text{H}_{32}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.	%	Sat.t.
12.14	94.05	37.48	104.55
18.45	101.60	38.95	104.50
22.90	102.75	45.77	104.45
28.44	103.95	53.15	103.55
31.97	104.15	58.93	101.05
33.36	104.30	61.80	100.50
34.30	104.30	72.84	92.40

Hoerr, Sedgwick and Ralston, 1946

%	f.t.	Sat.t.	%	f.t.	Sat.t.
0.5	20.0	-	3.9	-	60.0
0.9	30.0	-	5.5	-	70.0
1.4	40.0	-	8.2	-	80.0
2.1	50.0	-	12.8	-	90.0
			100	62.82	-

Nitromethane ($\text{CH}_3\text{O}_2\text{N}$) + Stearic acid ($\text{C}_{18}\text{H}_{36}\text{O}_2$)

Broughton and Jones, 1936

%	Sat.t.
37.555	114.0
40.61	"
43.33	"

Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Lecat, 1949

%	f.t.
0	114.2
30	112.4 Az
100	118.1

Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Caprylic acid ($\text{C}_8\text{H}_{16}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
20.1	0.0
90.0	10.3
100	16.30

Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Caprinic acid ($\text{C}_{10}\text{H}_{20}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
8.4	0.0
11.1	10.0
35.5	20.0
98.6	30.0
100	31.24

Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Pelargonic acid
($\text{C}_9\text{H}_{18}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
31.0	0.0
95.9	10.0
100	12.25

Nitroethane ($\text{C}_2\text{H}_5\text{O}_2\text{N}$) + Undecanoic acid
($\text{C}_{11}\text{H}_{22}\text{O}_2$)

Hoerr and Ralston, 1944

%	f.t.
7.5	0.0
11.7	10.0
56.7	20.0
100	28.13

Nitroethane ($C_2H_5O_2N$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f. t.
1.9	0.0
2.7	10.0
5.1	20.0
14.0	30.0
93.6	40.0
100	43.92

Nitroethane ($C_2H_5O_2N$) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.4	0.0	14.8	30.0
2.0	15.0	98.9	40.0
4.3	20.0	100	41.76

Nitroethane ($C_2H_5O_2N$) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.3	0.0	9.7	40.0
0.5	10.0	92.2	50.0
1.2	20.0	100	54.15
3.2	30.0		

Nitroethane ($C_2H_5O_2N$) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.1	0.0	9.3	40.0
0.2	10.0	96.1	50.0
0.7	20.0	100	52.54
2.3	30.0		

Nitroethane ($C_2H_5O_2N$) + Palmitic acid ($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
below 0.1	20.0	9.1	50.0
0.7	30.0	94.3	60.0
2.5	40.0	100	62.82

Nitroethane ($C_2H_5O_2N$) + Margaric acid ($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.2	30.0	97.7	60.0
1.9	40.0	100	60.94
8.8	50.0		

Nitroethane ($C_2H_5O_2N$) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.3	40.0	12.3	60.0
2.6	50.0	100	69.32

Nitroethane ($C_2H_5O_2N$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
0.2	-40	3.3	0
0.8	-30	8.0	10
1.3	-20	12.5	20
2.1	-10	C.S.T. = 31.7°	

Nitroethane ($C_2H_5O_2N$) + Linoleic acid ($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
below 0.1	-40	7.7	-10
0.4	-30	25.5	0
2.1	-20	C.S.T. = 1.5°	

Chloropicrine ($\text{C}_6\text{H}_5\text{N}_2\text{Cl}$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	111.9	-
19.5	107.65 Az	-
77	-	+0.75
100	118.1	-

Trimethyl phosphate ($\text{C}_3\text{H}_9\text{O}_4\text{P}$) + Acetic acid
($\text{C}_2\text{H}_4\text{O}_2$)

Pagel and Ruyle, 1944

mol%	f. t.	mol%	f. t.	mol%	f. t.
I		I		II	
100	16.6	58.8	-41.3	24.9	-75.6
99.3	16.2	53.1	-61.8	19.1	-72.1
98.9	15.8	51.4	-70.2	15.9	-70.4
96.0	13.9	48.7	-83.8	14.3	-68.9
93.4	11.9	47.1	-89.9 E	11.3	-67.3
91.4	10.4	44.8	-87.5	0	-62.4
89.7	8.7	41.6	-82.8		
86.7	5.8	37.1	-72.9		
80.8	0.7	28.8	-60.6		
75.0	-8.3	19.1	-55.4		
70.1	-15.2	11.3	-50.4		
66.4	-22.9	0	-46.1		
63.0	-30.0				

Nitrobenzene ($\text{C}_6\text{H}_5\text{O}_2\text{N}$) + Formic acid (CH_2O_2)

Ampola and Carlinfanti, 1895

%	f. t.	%	f. t.
0	+3.84	7.38	-0.68
0.54	3.35	12.42	-2.49
1.39	2.68	15.82	-3.38
2.71	1.72	25.91	-4.16
4.33	0.77		

Landolt, 1865

%	d	n_D
20°		
0	1.0456	1.5391
30.3	1.0858	1.4900
100	1.2189	1.3693

Udovenko and Ayrapetova, 1947

mol%	d		
	0°	25°	50°
100.00	1.2375	1.2088	1.1846
83.64	.2243	.1978	.1704
74.02	.2166	.1937	.1689
63.96	.2149	.1887	.1652
52.29	.2128	.1900	.1652
41.32	.2107	.1889	.1660
29.56	.2132	.1931	.1676
17.91	.2137	.1924	.1703
0.00	.2161	.1970	.1743

mol%	η		
	0°	25°	50°
100.00	2821.0	1537.2	976.7
83.64	2993.9	1575.6	1005.4
74.02	2896.7	1592.3	1028.6
63.96	2875.8	1593.0	1025.3
52.29	2815.6	1591.1	1042.7
41.32	2787.0	1604.3	1053.9
29.56	2832.3	1635.8	1083.8
17.91	2900.6	1675.5	1113.9
0.00	3120.2	1804.2	1191.5

mol%	κ		
	0°	25°	50°
100.00	0.74	1.24	1.76
83.64	.55	0.92	.32
74.02	.46	.76	.14
63.96	.44	.75	.03
52.29	.43	.73	.03
41.32	.40	.67	0.95
29.56	.37	.61	.81
17.91	.31	.52	.62
0.00	.31115	.1710	.4910

Nitrobenzene ($\text{C}_6\text{H}_5\text{NO}_2$) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.23	-0.240	84.11	-4.635
96.39	1.100	81.37	5.365
89.52	3.070		

Ampola and Carlinfanti, 1895

%	f. t.	%	f. t.
0	3.84	4.51	1.19
0.34	3.56	6.06	0.43
0.96	3.20	8.32	-0.84
1.89	2.67	11.87	-2.48
2.87	2.12	15.32	-4.12

Dahms, 1895

mol%	f. t.	mol%	f. t.
0.0	5.50	49.36	-10.0
1.27	5.10	54.24	-3.7
4.12	4.28	67.07	+1.3
10.25	2.53	78.05	5.35
22.78	-1.2	83.90	7.59
31.08	-3.75	91.91	11.09
37.62	-5.85	96.99	13.60
43.46	-7.8	98.82	14.62
44.7	-8.25	99.572	15.105
45.84	-8.63	100	15.39

Baud, 1913

mol%	f. t.	mol%	f. t.
100	16.70	56.5	-2.63
94.9	13.55	47.3	-8.00 E
90.2	10.80	40.0	-5.90
83.1	7.55	31.2	-3.70
72.6	3.92	19.8	-0.33
64.0	0.50	9.1	+2.50
		0	+5.60

Usanovitch and Tenenbaum, 1935

%	mol %	d			
		20°	40°	50°	80°
0	0	1.0516	1.0253	1.0051	0.9831
5.23	9.73	.0612	.0319	.0145	.9891
14.81	27.45	.0815	.0612	.0432	1.0106
15.31	27.61	.0864	.0645	.0441	.0104
26.99	42.54	.1035	.0825	.0613	.0418
32.03	49.10	.1212	.0911	.0718	.0385
36.92	54.63	.1291	.1001	.0825	.0641
58.07	73.09	.1618	.1309	.1041	.0854
62.70	77.67	.1694	.1332	.1132	.0978
86.12	93.25	.1946	.1645	.1472	.1256
100	100	.2041	.1879	.1561	.1391

%	mol %	η			
		20°	40°	60°	80°
0	0	1136	851.6	644.4	55.99
5.23	9.73	1176	861.2	652.5	56.32
14.81	27.45	1180	870.8	687.4	59.19
15.31	27.61	1182	871.8	687.8	59.32
26.99	42.54	1219	893.8	713.0	62.14
32.03	49.10	1241	924.7	734.7	62.98
36.92	54.63	1270	948.9	746.0	65.82
58.07	73.09	1435	1103.6	803.2	70.98
62.70	77.67	1439	1106.2	838.2	72.25
86.12	93.25	1635	1123.1	951.2	80.96
100	100	1750	1128.7	1035.0	89.52

Timofeev, 1905

%		U	
		20°	
100			0.487
23.6			0.394
0			0.358
%		Q dil.	
initial	final	(by mole acid)	
0	6.5		-260
6.5	11.0		-111
11.0	15.0		-90
15.0	19.5		-84
19.5	23.6		-64

Nitrobenzene ($C_6H_5NO_2$) + Isobutyric acid ($C_4H_8O_2$)

Ampola and Carlinfanti, 1895

%		f. t.	
0	3.84	6.79	+1.11
0.33	3.62	11.25	-0.59
1.04	3.34	15.63	-2.22
2.38	2.79	19.93	-3.70
4.06	2.13	27.20	-6.14

Nitrobenzene ($C_6H_5NO_2$) + Valeric acid ($C_5H_{10}O_2$)

Ampola and Carlinfanti, 1895

%		f. t.	
0	3.84	6.32	1.55
0.37	3.66	9.64	0.59
0.94	3.40	14.11	-0.81
2.31	2.98	20.76	-2.72
4.11	2.30	29.55	-4.39

Nitrobenzene ($C_6H_5O_2N$) (b. t. = 210.75) + Acids.

Lecat, 1949

		2nd Comp.	Az		
Acids	Formula	b. t.	%	b. t.	
Caproic	$C_6H_{12}O_2$	205.15	65	202.5	
Heptanoic	$C_7H_{14}O_2$	222.0	12	209.5	
Bromacetic	$C_2H_3O_2Br$	205.1	63	202.25	
α -Bromopropionic	$C_3H_5O_2Br$	205.8	60	203.3	
α -Chlorcrotonic	$C_3H_3O_2Cl$	212.5	30	208.0	

Nitrobenzene ($C_6H_5O_2N$) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
78.5	10.0
100	16.30

Nitrobenzene ($C_6H_5O_2N$) + Caprinic acid ($C_{10}H_{20}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.
15.3	10.0
56.7	20.0
97.3	30.0
100	31.24

Nitrobenzene ($C_6H_5O_2N$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.	%	f. t.
2.6	10.0	88.2	40.0
8.1	20.0	100	43.92
40.0	30.0		

Nitrobenzene ($C_6H_5O_2N$) + Myristic acid ($C_{14}H_{28}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.	%	f. t.
1.3	10.0	25.5	40.0
2.9	20.0	84.8	50.0
6.6	30.0	100	54.15

Nitrobenzene ($C_6H_5O_2N$) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.	%	f. t.
0.1	20.0	35.7	50.0
1.2	30.0	92.4	60.0
6.0	40.0	100	62.82

Nitrobenzene ($C_6H_5O_2N$) + Stearic acid
($C_{18}H_{36}O_2$)

Hoerr, Sedgwick and Ralston, 1946

%	f. t.	%	f. t.
below 0.1	30.0	52.8	60.0
1.4	40.0	100	69.32
8.9	50.0		

Nitrobenzene ($C_6H_5O_2N$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.
0	68.8
10	91.7

Nitrobenzene ($C_6H_5O_2N$) + Benzoic acid ($C_7H_6O_2$)

Mortimer, 1923

mol%	f. t.	mol%	f. t.
4.4	0	43.4	80
9.2	20	66.0	100
16.3	40	100.0	121.0
27.6	60		

Hrynakowski, Staszewski and Szmytowna, 1937

%	f. t.	E	%	f. t.	E
100	121.3	-	26.6	59.2	3.8
88.4	115.6	-	17.3	44.4	3.9
78.6	107.3	-	14.1	35.5	3.9
67.7	98.6	-	8.5	15.8	3.8
55.4	89.6	2.2	3.0	4.0	3.5
44.8	80.5	3.8	0.0	5.9	-
35.8	70.7	2.7			

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Acetic acid
($C_2H_4O_2$)

Timofeev, 1894

%	f. t.
15.2	13.5
15.7	15.5
17.8	23.0

m-Dinitrobenzene ($C_6H_4O_4N_2$) + Propionic acid
($C_3H_6O_2$)

Timofeev, 1894

%	f. t.
12.0	13.5
12.9	15.5
13.45	23.45

o-Nitrotoluene ($C_7H_7O_2N$) (b. t.=221.75) + Acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
Heptanoic acid	$C_7H_{14}O_2$	222.0	40	218.0	-
Levulinic acid	$C_5H_8O_3$	252.0	4	221.55	-0.6 (51%)
Chlorcrotonic acid	$C_3H_5O_2Cl$	212.5	72	211.2	-

o-Nitrotoluene ($C_7H_7O_2N$) + Benzoic acid
($C_7H_6O_2$)

Crockford and Hughes, 1930

mol%	f. t.	E	mol%	f. t.	E
0.0	-10.4	-	53.2	84.3	-14.0
5.6	-10.1	-	62.5	94.3	-14.7
11.1	+16.0	-14.1	73.2	102.74	-13.5
22.4	39.9	-14.0	81.5	109.9	-13.0
32.0	56.6	-13.8	91.0	116.8	-
42.9	71.1	-14.0	100.0	121.75	-

m-Nitrotoluene ($C_7H_7O_2N$) (b. t.=230.8) + Acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Heptanoic acid	$C_7H_{14}O_2$	222.0	70	200.0	
Caprylic acid	$C_8H_{16}O_2$	238.5	20	229.0	
Levulinic acid	$C_5H_8O_3$	252	15	229.5	

p-Nitrotoluene ($C_7H_7O_2N$) (b. t.=238.9) + Acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Caprylic acid	$C_8H_{16}O_2$	238.5	38	235.0	-
Levulinic acid	$C_5H_8O_3$	252	22	236.4	-
Benzoic acid	$C_7H_6O_2$	250.8	11	237.4	47

p-Nitrotoluene ($C_7H_7O_2N$) + Benzoic acid ($C_7H_6O_2$)

Crockford and Hughes, 1930

mol%	f. t.	E	mol%	f. t.	E
0.00	51.5	-	42.85	70.3	44.1
5.95	50.25	44.1	47.99	77.3	"
11.11	48.4	"	53.18	83.1	"
16.19	46.3	"	57.69	88.2	"
27.71	51.2	"	62.50	94.0	"
31.99	58.1	"	95.60	119.3	"
37.96	65.0	"	100.00	121.75	-

p-Nitrotoluene ($C_7H_7O_2N$) + Salicylic acid
($C_7H_6O_3$)

Crockford and Zurlburg, 1930

mol%	f. t.	mol%	f. t.
100	158.3	29.7	102.6
89.9	152.0	19.5	88.0
79.8	145.8	12.5	68.3
69.8	139.0	5.1	49.4
61.2	131.0	1.9	50.45
50.1	123.9	0	51.4
39.7	114.0		

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + Benzoic acid
($C_7H_6O_2$)

Crockford and Hughes, 1930

mol %	f. t.	E
0.00	69.75	-
14.3	65.3	-
26.7	59.8	59.4
39.0	72.3	59.4
50.0	83.1	59.4
60.0	91.6	59.4
69.1	99.7	59.4
77.8	106.9	59.4
85.7	113.3	59.4
93.1	118.2	59.4
100.0	121.75	-

2,4-Dinitrotoluene ($C_7H_6O_4N_2$) + Salicylic acid
($C_7H_6O_3$)

Crockford and Zurburg, 1930

mol%	f. t.	mol%	f. t.
100	158.3	39.7	113.4
91.2	154.3	29.3	102.3
84.4	150.5	20.4	86.8
74.6	144.0	10.1	66.3
64.4	137.2	2.0	68.4
48.6	124.5	0	69.3

2,4,6-Trinitrotoluene ($C_7H_5O_6N_3$) + Benzoic acid
($C_7H_6O_2$)

Crockford and Hughes, 1930

mol %	f. t.	E
0.00	80.8	-
13.8	75.5	64.5
20.0	70.3	64.5
38.9	77.5	64.5
50.0	88.6	64.5
69.0	103.9	64.5
77.6	109.4	64.5
85.6	113.8	64.5
96.4	119.9	-
100.0	121.75	-

2,4,6-Trinitrotoluene ($C_7H_5O_6N_3$) + Salicylic acid
($C_7H_6O_3$)

Crockford and Zurburg, 1930

mol%	f. t.	mol%	f. t.
100	158.3	40.9	120.0
90	152.7	30	107.9
80	147.1	19.9	93.4
70	140.6	10	76.3
59.9	134.0	3	79.0
55.1	130.1	0	80.1

2,4,6-Trinitrotoluene ($C_7H_5O_6N_3$) + 2,4,6-Trinitro-
benzoic acid ($C_7H_3O_8N_3$)

Burkardt and Moore, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	80	50	198
8	75 E	60	207
10	100	70	214
20	150	80	221
30	174	90	227
40	187	100	233

o-Nitrobenzaldehyde ($C_7H_5O_3N$) + Trichloroacetic
acid ($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	49.5	5.6
90.8	52.9	41.6	16.1
82.2	46.5	31.4	26.3
73.3	38.2	20.2	33.4
64.4	27.8	11.1	37.8
55.2	13.5	0	42.9

m-Nitrobenzaldehyde ($C_7H_5O_3N$) + Trichloroacetic
acid ($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	57.8	21.7
91.0	51.6	39.0	29.8
83.9	46.1	30.4	37.7
77.4	39.8	20.3	45.4
70.2	31.6	11.9	49.9
62.3	20.4	0	55.7
54.4	6.0-14.0		

m-Nitrobenzaldehyde ($C_7H_5O_3N$) + Benzoic acid
($C_7H_6O_2$)

Passerini, 1924

%	f. t.	E	min.	tr. t.	min.
0	58	-	-	-	-
6.7	51	-	-	-	-
13.4	48	48	15	-	-
20	57	"	13	-	-
26.7	66	"	10	-	-
33.4	73	"	9	-	-
36.7	77	"	8.5	-	-
40	81	"	8	-	-
43.4	84	-	-	40	15
46.7	87	-	-	"	14
50	91	-	-	"	13
53.4	93	-	-	"	12
60	98	-	-	"	9
66.7	103	-	-	"	6
73.4	107	-	-	"	3
80.0	111	-	-	"	1
87.0	114	-	-	-	-
93.4	117	-	-	-	-
100.0	120	-	-	-	-

p-Nitrobenzaldehyde ($C_7H_5O_3N$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	52.5	57.3
91.4	52.2	44.6	68.2
84.1	46.0	35.3	78.3
75.7	37.4	21.9	90.7
65.5	33.6	12.2	97.4
59.3	46.0	0	104.4

Nitropiperonal ($C_8H_5O_5N$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.9	48.4	55.9
91.0	52.3	38.0	66.2
82.9	45.4	26.1	76.9
74.4	37.3	14.5	85.7
66.8	28.9-32.9	0	94.1
57.0	46.1		

o-Chloronitrobenzene ($C_6H_4O_2NCl$) + Formic acid
(CH_2O_2)

Bruni and Berti, 1900

wt%	mol%	f. t.	wt%	mol%	f. t.
100	100	+7.1	45.30	72.68	23.35
99.235	99.772	6.93	41.50	70.46	23.50
98.512	99.552	6.775	37.05	66.47	23.75
97.333	99.190	6.57	32.80	60.92	24.05
96.603	98.983	6.45	28.72	58.91	24.10
94.976	98.478	6.17	23.29	51.40	24.30
93.176	97.906	5.97	20.89	47.44	24.55
90.967	97.118	5.70	18.38	43.47	24.7
83.63	94.474	8.95	17.11	41.41	24.8
76.92	91.597	15.90	13.26	34.19	25.3
72.14	89.65	18.2	12.62	33.14	25.4
67.54	87.44	20.1	7.46	21.65	26.7
63.76	85.44	21.3	5.51	16.48	27.35
57.55	81.93	22.2	2.74	9.23	29.35
52.57	78.76	22.8	0	0	32.1
48.02	75.56	23.1			

o-Chloronitrobenzene ($C_6H_4O_2NCl$) + Benzoic acid
($C_7H_6O_2$)

Lecat, 1949

%	b. t.
0	246.0
33	243.0 Az
100	250.8

m-Chloronitrobenzene ($C_6H_4O_2NCl$) + Heptanoic acid
($C_7H_{14}O_2$)

Lecat, 1949

%	b. t.
0	235.5
-	221.5 Az
100	222.0

p-Chloronitrobenzene ($C_6H_4O_2NCl$) (b. t.=239.1) + Acids.

Lecat, 1949

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Caprylic acid	$C_8H_{16}O_2$	238.5	-	235.5	-
Levulinic acid	$C_5H_8O_3$	252	22	237.0	-
Benzoic acid	$C_7H_6O_2$	250.8	16	237.75	86

M. TWO HYDROXYL DERIVATIVES .

XXXVII. TWO HYDROXYL DERIVATIVES OF DIFFERENT SERIES

Methyl alcohol (CH_3O) + Phenol ($\text{C}_6\text{H}_5\text{O}$)

Weissenberger, Schuster and Schüler, 1924

mol%	p	mol%	p
15°			
77	8.5	40	43
66.7	14	33.3	48
57	31	28.6	51
50	36	0	71.4

Weissenberger, Henke and Sperling, 1925

mol%	p	mol%	p
20°			
75	11.1	40	44.2
60	21.4	25	63.6
50	31.7	0	96.0

Weissenberger, Schuster and Schüler, 1924

mol%	η	σ	mol%	η	σ
	(water=1)			(water=1)	
15°					
71.3	5.15	0.576	40	2.06	0.513
66.3	4.46	.578	33.3	1.66	.500
57	3.27	.557			
50	2.74	.541			

Methyl alcohol (CH_3O) + Pyrogallol ($\text{C}_6\text{H}_3\text{O}_3$)

Weissenberger, Schuster and Henke, 1925

mol%	p
20°	
28.6	49.4
25	57.2
22.2	64.0

Methyl alcohol (CH_3O) + Resorcinol ($\text{C}_6\text{H}_6\text{O}_2$)

Shakhparonov and Martinova, 1953

mol%	p		
	0°	20°	25°
0	29.50	96.20	123.90
2	28.37	93.30	120.90
5	27.42	91.85	117.50
10	24.70	80.40	104.00
15	21.62	71.10	93.40
20	20.25	63.90	82.65
25	18.40	60.30	77.80

mol%	d (mg/cc) in V		
	0°	20°	25°

0	0.05550	0.1683	0.2139
2	.05330	.1632	.2081
5	.05160	.1610	.2024
10	.04650	.1408	.1794
15	.04075	.1263	.1609
20	.03810	.1119	.1407
25	.03660	.1057	.1340

Taimni, 1929

%	η (water=1)		
	35°	30°	25°
59.8	-	0.1726	0.2187
61.6	0.1601	.2006	.2550
63.3	.1823	.2293	.2975
64.5	.2022	.2575	.3332
20°			
59.8	0.2818	0.3682	0.4854
61.6	.3280		.5883
63.3	.3896	0.5216	-
64.5	.4404	-	-

Timofeev, 1905

%	U
20°	
0	0.600
34	.5705

initial	%	final	Q dil. (by mole resorc.)
0		1.56	0
1.56		3.10	0
3.1		13.7	-0.27
13.7		16.0	-0.66
16.0		25.9	-0.88
25.9		28.1	-1.35
28.1		32.4	-1.39
32.4		34.0	-1.66
0		0.94	0
0.94		3.75	0
3.75		18.4	-0.43
18.4		20.0	-0.86
44.1		44.6	-2.08

Methyl alcohol (CH_3O) + o-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p	mol%	p
15°			
66.7	15.0	28.6	49.0
50	29.0	25	53.0
40	37.5	22.2	56.7
33.3	43.9		

mol%	η	σ	mol%	η	σ
(water=1)			(water=1)		
15°					
66.7	4.88	0.550	28	1.63	0.429
50	3.07	.493	25	.44	.413
40	2.31	.466	22.2	.28	.400
33.3	1.88	.447			

Methyl alcohol (CH_3O) + m-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p	mol%	p
15°			
66.7	15.6	28.6	52.0
50	29.2	25	55.1
40	40.0	22.2	57.0
33.3	47.7		

mol%	η	σ	mol%	η	σ
(water=1)			(water=1)		
15°					
66.7	2.47	0.508	28.6	1.20	0.436
50	1.96	.482	25	1.42	.432
40	1.57	.463	22.2	1.30	.422
33.3	1.36	.448			

Methyl alcohol (CH_3O) + p-Cresol ($\text{C}_7\text{H}_8\text{O}$)

Weissenberger, Schuster and Wojnoff, 1925

mol%	p	mol%	p
15°			
66.7	16.4	28	48.2
50	31.0	25	52.4
40	37.9	22	55.9
33.3	43.4		

mol%	η	σ	mol%	η	σ
(water=1)			(water=1)		
15°					
66.7	6.01	0.521	28.6	1.61	0.420
50	4.05	.481	25	.48	.431
40	2.72	.448	22.2	.32	.415
33.3	2.01	.431			

Methyl alcohol (CH_3O) + Thymol ($\text{C}_{10}\text{H}_{14}\text{O}$)

Teitelbaum, Gortalova and Gamelina, 1950

mol%	d	η	mol%	d	η
20°					
100	0.8560	826	30	0.8315	774
80	.8526	799	20	.8325	732
60	.8467	799	0	.7923	578
40	.8378	793			

Zoppellari, 1905

%	t	d	n_D
7.5875	7.7	0.81581	1.34607
14.1324	7.1	.82799	.35766
22.6825	9.7	.83937	.37183
34.3995	16.3	.85506	.39075

Methyl alcohol (CH_3O) + p-Chlorphenol ($\text{C}_6\text{H}_5\text{OCl}$)

Weissenberger, Schuster and Lielacher, 1925

mol%	p
20°	
10	82.0
20	65.9
30	50.0
40	34.0
50	25.3

Methyl alcohol (CH_4O) + Picric acid ($\text{C}_6\text{H}_3\text{N}_3\text{O}_7$)

Vandenberghe, 1899

%	D b.t.	d (at b.t.)
5.00	+0.175	0.773
9.15	.338	.794
12.62	.495	.82
19.62	.72	.854

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ
	13°	
0	0.747	23.30
0.53	.811	23.40
1.10	.833	23.71
2.13	.859	24.12

Methyl alcohol (CH_4O) + α -Naphthol ($\text{C}_{10}\text{H}_8\text{O}$)

Weissenberger, Schuster and Mayer, 1924

mol%	p	mol%	p
	20°		
33.2	53	25	71
29.4	63	20.8	76
28.6	66	18	79

mol%	η	σ
	(water=1)	
	20°	
33.2	3.1	0.496
24.7	1.8	.456
20.8	1.5	.428
18	1.3	.404

Ethyl alcohol ($\text{C}_2\text{H}_6\text{O}$) + Phenol ($\text{C}_6\text{H}_6\text{O}$)
Weissenberger, Schuster and Schuler, 1924

mol%	p	mol%	p
	15°		
66.2	6.1	39.1	16
56.2	9.4	33.3	19
49.3	13	24.4	24

Weissenberger, Henke and Sperling, 1925

mol%	p	mol%	p
	20°		
75	4.4	40	20.9
60	9.8	25	29.9
50	14.7	0	44.0

Paterno, 1896

%	D f.t.	%	D f.t.
99.66	-0.52	92.81	12.11
99.07	1.44	91.57	14.43
97.97	3.26	90.50	17.50
97.20	4.54	88.85	20.25
95.97	6.86	85.44	27.05

Perrakis, 1925

mol%	f.t.	mol%	f.t.
100	+39.9	69.09	+2.6
92.71	32.55	61.00	-4.7
83.85	22.8	59.00	15.2
80.62	17.1	50.77	-30.0
74.91	9.9		

Bedson and Williams, 1881

%	t	d	%	t	d
0	20	0.8019	48.85	20	0.9213
	25	0.7976	100	20	0.8019
20.64	20	0.8540		25	0.7976
	25	0.8487		40	1.0591
34.84	20	0.887		45	1.0545
	25	0.883			

Weissenberger, Schuster and Schüler , 1924			
mol%	η (water=1)	mol%	σ (water=1)
76.5	6.21	72.5	0.449
65.9	4.10	65.8	.447
56.6	3.25	56.2	.441
46.7	2.52	46.3	.431
40	2.12	39.2	.427
33.3	1.82	33.2	.422
22.8	1.55	24.2	.414

Morgan and Scarlett jr, 1917			
%	σ	%	σ
100	35°	100	0°
74.61	38.033	49.80	41.701
50.56	32.120	44.18	30.23
44.18	27.148	40.27	29.22
40.32	26.038	25.40	28.52
25.40	25.415	0	26.18
0	23.190		23.090
	20.367		

Bedson and Williams, 1881			
%	t	H_α	H_β
20.64	20	.39212	.40036
34.84	20	.39003	.39841
48.85	20	.41584	.42578
100	40	.41371	.42348
	45	.43680	.44827
		1.53618	1.55496
		.53386	.55263

Hartwig, 1891			
mol %	$\kappa \cdot 10^{10}$	$\tau \cdot 10^3$	
0	18°		
0.17	9.0	187.9	
0.7	-	20.86	
61.6	10.1	-	
100	0.1269	34.41	

Timofeev, 1905			
%	U		
0	20°	0.5933	
8		0.576	
57.1		0.512	

% initial final Q dil. (by mole phenol)		
0	0.5	-0.60
0.5	2.9	-0.57
2.9	5.2	-0.72
5.2	7.4	-0.76
54.1	55.1	-1.62
55.1	56.1	-1.70
56.1	57.1	-1.68

Ethyl alcohol (C ₂ H ₆ O) + Pyrocatechol (C ₆ H ₆ O ₂)			
Weissenberger, Henke and Bregmann, 1925			
mol%	p	mol%	p
17°			
36	14.8	20	25.2
34	15.0	14	30.8
25	22.5	0	36.77

mol%	η	σ	mol%	η	σ
(water=1)		(water=1)			
17°					
6.1	7.8	0.40	57.8	4.4	0.39
60.6	4.6	.39	57.1	4.3	.38
59.9	6.3	.40	56.2	3.6	"
59.5	6.8	.40	55.6	3.2	"
59.2	6.1	.39	54.9	2.9	"
58.5	5.2	.39			

Walker, Collett and Lazzell, 1931			
mol%	f. t.		
100.00	104.5		
96.05	101.7		
69.84	81.5		
59.10	67.9		
45.45	43.1		

Ethyl alcohol (C ₂ H ₆ O) + Resorcinol (C ₆ H ₆ O ₂)			
Weissenberger, Henke and Bregmann, 1925			
mol%	p	mol%	p
17°			
34	12.6	17	25.4
29	16.0	14	26.8
25	18.6	11	29.0
20	22.3	0	36.77

Shakhparonov and Martinova, 1953

mol%	p			
	0°	15°	20°	25°
0	12.75	32.60	43.92	59.07
2	12.25	32.22	43.64	58.72
5	11.52	30.83	41.95	56.91
10	10.06	27.50	37.55	51.12
20	8.11	21.57	29.22	39.56
30	5.01	15.17	20.63	28.02

Speyers, 1902

mol%	f. t.
34.37	0.0
38.69	9.2
41.84	31.8
50.6	47.07
73.1	50.03

Mortimer, 1923

mol%	f. t.	mol%	f. t.
35.4	0	50.7	60
38.9	20	64.0	80
43.8	40	100.0	110.2

Walker, Collettt and Lazzell, 1931

mol%	f. t.
53.13	60.1
67.85	83.8
81.92	95.8
100.00	109.4

Shakhparonov and Martinova, 1953

mol%	d (V) (mg/cc) in V			
	0°	15°	20°	25°
0	0.03450	0.0837	0.1105	0.1478
2	.03310	.0826	.1096	.1452
5	.03105	.0790	.1056	.1408
10	.02720	.0705	.0945	.1266
20	.02190	.0552	.0726	.0979
30	.01351	.0389	.0519	.0694

Speyers, 1902

mol%	t	d
sat. sol.		
34.37	0.0	1.033
37.69	14.1	.036
41.84	36.1	.054
47.07	62.5	.077
50.03	81.4	.107

Weissenberger, Henke and Bregmann, 1925

mol%	η	σ	mol%	η	σ
(water=1)			(water=1)		
17°					
36	26.3	0.41	22	7.1	0.39
34	19.6	.41	20	6.0	.38
33	16.8	.40	18	5.1	.38
29	12.6	.40	17	-	.38

Ethyl alcohol (C_2H_6O) + Hydroquinone ($C_6H_6O_2$)

Walker, Collettt and Lazzell, 1931

mol%	f. t.	mol%	f. t.
100.00	172.9	44.33	115.1
93.85	167.9	34.71	91.2
67.61	146.0	22.18	43.0
57.05	134.5		

Ethyl alcohol (C_2H_6O) + Pyrogallol ($C_6H_6O_3$)

Weissenberger, Schuster and Henke, 1926

mol%	p	η	σ
(water=1)			
20°			
28.6	23.5	1.43	0.428
25	25.3	1.42	.407
22.2	27.2	0.83	.388
20	29.8	0.65	.363

Ethyl alcohol (C ₂ H ₆ O) + o-Cresol (C ₇ H ₈ O)			
Weissenberger and Piatti, 1924			
mol%	p	mol%	p
89.3	2.8	43.5	18.8
73.5	5.3	37.4	22.8
66.7	7.3	33.3	26.0
62.1	9.7	25	29.0
49.5	15.3	22.2	30.4
Perrakis, 1925			
mol%	f. t.	mol%	f. t.
100	29.05	71.10	+1.7
91.31	22.60	65.84	-4.0
83.00	14.00	56.39	-17.2
76.89	8.3	48.40	-31
mol%	d	Dv (cc/mole)	
30°			
100	1.0365	-	
76.96	1.0053	-0.447	
63.35	0.9825	.653	
52.06	.9603	.770	
39.70	.9312	.796	
39.10	.9297	.794	
25.55	.8906	.725	
25.25	.8896	.719	
7.01	.8210	.351	
0	.7868	-	
Weissenberger and Piatti, 1924			
mol%	η	mol%	η
(water=1)			
18°			
83.3	6.48	23	1.95
56.9	4.20	19.1	.83
45.3	3.14	15.5	.65
35.7	2.51	5.78	.36
29	2.18	0	.14
mol%	σ	mol%	σ
(water=1)			
18°			
100	0.459	29	0.418
66.7	.446	23	.409
56.2	.440	19.1	.407
45.4	.434	15.5	.399
40.3	.431	0	.301
35.6	.425		

Perrakis, 1925			
mol %	U	Q mix	
	cal/g	cal/mole	
100	0.505	54.540	-
80.09	0.528	50.506	0.191
76.81	0.529	49.526	0.216
63.01	0.536	45.595	0.327
54.39	0.541	43.130	0.385
47.92	0.544	41.186	0.424
41.45	0.548	39.291	0.431
33.62	0.553	36.965	0.410
23.82	0.559	33.970	0.308
17.16	0.564	31.944	0.239
9.31	0.568	29.406	0.159
7.00	0.571	28.747	0.127
0	0.580	26.680	-
Ethyl alcohol (C ₂ H ₆ O) + m-Cresol (C ₇ H ₈ O)			
Weissenberger and Piatti, 1924			
mol%	p	mol%	p
18°			
80	6.0	36.4	24.3
66.7	9.2	33.3	26.0
61.7	11.4	28.6	28.1
51.8	15.8	25	29.2
42.5	20.1		
Piatti, 1930-31			
mol%	b. t.	mol%	b. t.
100	201.5	40	97.2
90	176.5	30	90.9
80	152.4	20	85.8
70	130.5	10	81.1
60	115.8	0	78.3
50	105.4		
Piatti, 1924			
mol%	η	mol%	η
(water=1)			
18°			
73	6.29	27.9	2.18
59.2	4.56	21.4	1.82
43.2	3.10	15.4	1.51
35.2	2.60	0	1.14

Piatti, 1930-31

mol%	0°	10°	20°	η 30°	40°	50°	60°
100	95000	43900	20800	10000	6180	4380	3370
90	59400	17100	12500	6990	4930	3520	2810
80	36600	12500	9180	5570	4070	2990	2400
70	20700	9450	6870	4580	3380	2560	2060
60	12500	7500	5270	3760	2870	2220	1800
50	8730	5980	4220	3140	2450	1940	1610
40	6220	4520	3350	2590	2120	1700	1430
30	4940	3320	2660	2110	1770	1480	1280
20	3510	2600	2110	1700	1460	1240	1120
10	2510	1910	1700	1420	1200	1010	991
0	1920	1570	1280	1080	925	800	725

Weissenberger and Piatti, 1924

mol%	σ (water=1)	mol%	σ (water=1)
18°			
100	0.437	35.1	0.407
73	.430	21.4	.390
58.2	.425	15.3	.377
52.1	.421	0	.301
43.2	.415		

Ethyl alcohol (C_2H_6O) + p-Cresol (C_7H_8O)

Weissenberger and Piatti, 1924

mol%	p	mol%	p
18°			
85.5	4.0	43.1	19.2
78.1	5.5	36.4	24.0
66.7	8.0	33.3	26.1
57.5	12.0	25	29.7
50	15.3	0	39.05

mol%	η (water=1)	mol%	η (water=1)
------	---------------------	------	---------------------

18°			
73	7.36	38	2.05
62.1	5.05	21.1	1.70
52.1	3.54	15.4	1.14
35.2	2.46		

mol%	σ (water=1)	mol%	σ (water=1)
------	-----------------------	------	-----------------------

18°			
100	.0.437	38	0.396
73	.428	21.1	.388
52.1	.418	15.4	.383
35.2	.405	0	.301

Ethyl alcohol (C_2H_6O) + Cresol (C_7H_8O)

Berl and Schwebel, 1922

%	p	%	p
0°		20°	
9.99	0.62	1.43	0.21
12.81	1.03	5.73	1.23
18.37	1.59	12.24	3.30
24.23	2.40	19.87	6.92
		24.07	8.15

Ethyl alcohol (C_2H_6O) + Guaiacol ($C_7H_8O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1)	σ (water=1)
17°			
80	7.8	-	-
67	12.0	5.2	0.55
50	14.5	4.1	.50
40	21.8	3.3	.47
34	25.0	3.0	.45
29	27.0	2.6	.43

Ethyl alcohol (C_2H_6O) + Salol ($C_{13}H_{10}O_3$)

Campetti, 1917

t	U
0%	
40	0.6393
58	0.7024
52.13%	
40.30	0.5540
44.12	0.5572
87.55%	
40.06	0.4418
44.12	0.4516
100%	
44.1	0.3908

Ethyl alcohol (C_2H_6O) + Salicylic aldehyde
($C_7H_6O_2$)

Weissenberger, Henke and Bregmann, 1925

mol%	p	η (water=1)	σ
17°			
67	16.3	2.1	0.52
50	27.3	1.8	.50
40	28.6	1.7	.49
34	29.8	1.6	.47
29	30.7	-	-
25	31.3	0.75	0.45
20	32.4	-	-

Ethyl alcohol (C_2H_6O) + o-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f. t.	%	f. t.
100	44	25.54	23.1
91.22	41.3	18.09	17.3
86.68	37.3	15.64	12.4
66.67	34.3	11.50	6.7
41.03	30.2	9.22	0

Ethyl alcohol (C_2H_6O) + m-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f. t.	%	f. t.
100	93	75.20	45.5
91.72	85.0	69.03	30.5
89.49	77.2	64.75	23.4
84.71	65.5	58.94	11.0
80.87	57.5	53.87	1.0
77.54	50.7	-	-

Ethyl alcohol (C_2H_6O) + p-Nitrophenol ($C_6H_5O_3N$)

Carrick, 1922

%	f. t.	%	f. t.
100	114	73.61	45.2
91.05	89.8	71.01	38.6
88.89	81.1	65.96	26.1
84.50	71.2	61.70	18.5
80.60	62.7	57.23	10.0
76.16	52.7	53.65	0

Ethyl alcohol (C_2H_6O) + Picric acid ($C_6H_3O_7N_3$)

Vandenberghe, 1899

%	D b. t.	d (at b. t.)
2.25	+0.115	0.747
6.03	.395	.767
9.78	.5	.791
16.44	.815	.835
21.70	1.04	.874

Ethyl alcohol (C_2H_6O) + 4-Brom-1-naphthylamine.
2,6-Dinitrophenol ($C_{16}H_{12}O_5N_3Br$)

Hertel and Frank, 1934

%	f. t.	%	f. t.
red form		yellow form	
6.2	-72	2.9	-71
11.0	-48	6.1	-32
26.1	0	12.9	0
40.5	+24	23.1	+23
46.2	30	30.6	32
56.5	40	38.1	40
100.0	84.5	50.0	50
		100.0	91.5

Ethyl alcohol (C_2H_6O) + o-Chlorphenol (C_6H_5OCl)

Peel, Madgin and Briscoe, 1928

50 vol% Dv= -2.2% Dt= +14.25°

Propyl alcohol (C_3H_8O) + Resorcinol ($C_6H_6O_2$)

Timofeev, 1905

% initial final		Q diss. (by mole resorc.)
0	6.2	-0.33
6.2	11.6	-0.62
11.6	16.5	-0.92
16.5	20.8	-1.07
20.8	24.8	-1.28
24.8	28.3	-1.48

Propyl alcohol (C_3H_8O) + Picric acid ($C_6H_3O_7N_3$)

Vandenberghe, 1899

%	D h. t.	d (at h. t.)
3.22	+0.24	0.748
5.53	.385	.758
8.35	.575	.771
11.89	.815	.789
18.94	1.24	.828
23.54	1.49	.858

Isopropyl alcohol (C_3H_8O) + Phenol (C_6H_6O)

Weissenberger, Henke and Sperling, 1925

mol%	p
20°	
75	1.8
60	5.2
50	10.6
40	16.2
25	26.0

Butyl alcohol ($C_4H_{10}O$) + Resorcinol ($C_6H_6O_2$)

Shakhparonov and Martinova, 1953

mol%	p		d (in mg/cc) in V	
	20°	25°	20°	25°
0	4.80	6.98	0.01950	0.02790
2	.70	6.99	.01910	.02795
5	.64	5.78	.01885	.02710
10	.17	6.11	.01695	.02445
15	3.76	5.60	.01530	.02240
20	.49	5.17	.01420	.02065
25	.26	4.61	.01325	.01842
30	2.87	3.90	.01168	.01560

Isobutyl alcohol ($C_4H_{10}O$) + Phenol (C_6H_6O)

Weissenberger, Henke and Sperling, 1925

mol%	p
20°	
75	0.5
60	1.6
50	2.6
40	3.6
25	5.4

Trimethylcarbinol ($C_4H_{10}O$) + Phenol (C_6H_6O)

Paterno and Montemartini, 1894

%	f. t.	%	f. t.
0	18.79	25.326	13.49
1.224	17.68	27.112	14.87
3.054	15.89	28.948	16.15
6.303	12.44	30.354	16.62
9.794	8.76	33.085	17.74
12.366	5.425	78.995	3.89
15.003	3.235	80.943	6.075
16.054	3.555	82.457	9.08
17.438	5.710	84.196	14.45 (2+1)
18.317	6.465	88.661	21.77
19.197	7.785	91.827	26.85 and
20.110	8.735	97.135	33.905
20.942	9.415	99.030	36.03
23.413	12.085	100	37.07 (1+2)

Paterno and Ampola, 1897

%	f. t.	E	%	f. t.
0	24.95	-	56.29	13.10
1.91	23.38	-	56.58	12.85
5.49	19.70	-	58.06	10.95
8.96	15.86	-	59.34	9.34
12.62	11.25	-	59.45	10.07
17.10	9.65	-	60.57	7.54
18.10	10.69	8.34	60.92	10.79
20.28	13.66	8.14	62.12	4.48
23.05	16.21	-	62.29	12.05
26.28	18.85	-	63.36	13.13
29.23	20.60	-	63.38	12.99
30.13	19.95	-	64.42	13.68
34.17	22.60	-	65.83	14.17
35.08	23.10	-	67.34	14.83
37.31	23.28	-	68.77	15.30
38.11	23.11	-	70.06	15.56
39.46	23.29	-	71.24	15.66
41.90	22.99	-	72.73	15.75
42.77	22.54	-	74.66	15.54
45.72	21.80	-	75.44	15.12
46.11	21.60	-	76.99	14.47
48.55	20.07	-	77.85	14.04
51.49	18.17	-	79.14	9.30
53.02	16.44	-	80.78	12.24
54.18	15.44	-	100.0	40.87
(2+1)	(1+2)			

Paterno and Mieli, 1908					
%	d		%	d	
	25°	46°		25°	46°
100.00	-	1.04546	29.23	0.8571	0.8375
79.63	1.0032	0.9852	24.87	.8442	.8238
48.25	0.9105	0.8918	0.00	.78248	.7561
Trimethylcarbinol ($C_4H_{10}O$) + Pyrocatechol ($C_6H_6O_2$)					
Kremann and Wlk, 1919					
%	f. t.	E	%	f. t.	E
0	23	-	52.1	29	24.3
4.4	19.8	-	54.8	35	-
8.4	16	9.5	55.7	39.5	-
12.8	-	"	57.9	41	-
17.6	13	-	58.4	39	-
23.4	19	-	58.6	43.2	-
27.9	23	-	61.1	51	-
32.1	26.5	-	63.6	59	-
37.6	28.7	-	64.1	58	-
41.6	29	-	69.1	68.9	-
42.9	29	-	74.9	69.7	-
44.8	28	-	79.2	81	69
48.0	26	24.5	84.2	92	"
50.0	26	"	93.0	99.5	-
50.6	26.5	24.3	100	103	-
(2+1)			(1+2)		
Trimethylcarbinol ($C_4H_{10}O$) + Resorcinol ($C_6H_6O_2$)					
Kremann and Wlk, 1919					
%	f. t.	E	%	f. t.	E
0	23	-	56.9	45.8	-
4.3	20.6	-	57.9	45.8	-
8.8	13.7	9	58.5	45.7	-
12.5	12.3	9	59.8	45.8	-
18.9	24	-	63.9	53	45.5-45.1
22.9	29.9	-	65.0	53.5	-
28.8	36.9	-	65.4	58	45.5-45.1
32.6	42.8	-	68.7	69	-
33.8	43	-	69.1	68	-
37.7	46.2	-	70.4	70	43.5
40.6	47.3	-	71.8	73.4	43.5
40.8	46.9	-	73.1	77.5	-
42.7	47.3	-	76.4	82.5	43.5
45.3	47	-	80.3	88.5	43.5
47.5	46.5	-	82.0	91	-
49.4	44.8	43.5	89.3	100.5	-
49.7	45.1	43.5	95.3	106.5	-
52.6	43.5	-	100	109	-
53.5	44	-			
54.8	45	-	(1+1)	(2+1)	
Trimethylcarbinol ($C_4H_{10}O$) + Hydroquinone ($C_6H_6O_2$)					
Kremann and Wlk, 1919					
%	f. t.	E	%	f. t.	E
100	171	-	12.0	54	-
86.5	168	-	5.8	41	22
71.6	167	-	2.2	22.5	22
21.8	72	-	0	23	-
16.8	59	-			
Trimethylcarbinol ($C_4H_{10}O$) + Pyrogallol ($C_6H_6O_3$)					
Kremann and Wlk, 1919					
%	f. t.	E	%	f. t.	E
100	126	-	36.9	54.2	-
87.6	112	-	31.6	51.9	-
83.8	108.5	-	28.1	49.1	-
76.9	99.5	-	24.1	45.5	-
72.2	94	54.2	21.3	43	-
65.7	84	-	18.8	40	-
59.1	75.2	-	15.5	35.5	-
54.0	63.5	54.2	12.5	30	16
48.5	55.7	54.2	10.9	27.5	"
44.8	56.2	-	5.8	18.1	"
41.8	55.9	-	1.8	22.1	"
41.6	55.5	-	0	23	-
(2+1)					
Trimethylcarbinol ($C_4H_{10}O$) + Thymol ($C_{10}H_{14}O$)					
Paterno and Ampola, 1897					
%	f. t.	%	f. t.		
0.0	24.97	72.13	-3.72		
1.01	24.47	74.75	+9.28		
3.47	22.97	78.28	+15.60		
7.56	20.02	79.98	18.84		
10.43	17.87	83.55	25.33		
13.51	15.47	86.87	31.11		
16.48	12.16	90.54	37.71		
19.31	9.87	95.90	43.89		
20.26	6.74	99.18	48.15		
23.94	2.31	100.0	49.12		
24.80	-2.27				
27.41	-7.17				
30.01	-12.82				
34.10	below -20				

Trimethylcarbinol ($C_4H_{10}O$) + o-Nitrophenol
 ($C_6H_5O_3N$)

Kremann, Mauermann and al., 1923

%	f. t.	E	%	f. t.	E
100.0	45	-	48.34	36	-
90.0	43	-	43.36	35	-
84.90	41	11	42.24	34.5	11
70.25	37	"	36.72	32	"
60.00	32	"	28.25	26	"
55.14	30	"	15.72	16	"
54.90	33	31	4.45	18	"
50.74	35	-	0.00	21	-
48.39	36	-			
(2+1)					

 Trimethylcarbinol ($C_4H_{10}O$) + m-Nitrophenol
 ($C_6H_5O_3N$)

Kremann, Mauermann and al., 1923

%	f. t.	E	%	f. t.	E
100	95	-	42.18	32	1
92.03	87	-	40.00	30	1
80.65	74	28	33.16	22	1
75.75	67.5	28	28.54	15.5	-
66.04	52	-	23.18	7	1
59.53	35	28	17.60	5	1
53.26	32	28	11.20	13	-
49.84	34	-	6.66	18	-
44.91	34	-	0	24	-
(2+1)					

 Trimethylcarbinol ($C_4H_{10}O$) + p-Nitrophenol
 ($C_6H_5O_3N$)

Kremann, Mauermann and al., 1923

%	f. t.	E	%	f. t.	E
100	114	-	42.32	35	-
93.07	103	-	38.60	32.5	7
84.36	90	-	38.35	32	-
76.90	73	23	35.64	30	-
68.30	53	"	32.16	27	7
56.82	34	"	28.00	22	-
56.66	30.5	"	22.19	14	-
53.64	30	-	17.93	8	7
47.8	37	7	9.70	17	7
44.84	36	-	0	24	-
(2+1)					

 Trimethylcarbinol ($C_4H_{10}O$) + 2,4-Dinitrophenol
 ($C_6H_4O_5N_2$)

Kremann, Mauermann and al., 1923

%	f. t.	E	%	f. t.	E
100	111	-	49.21	82	20
91.32	99	-	40.27	77	"
88.81	94.5	85	31.38	69	"
86.2	89.0	85	17.73	55	"
82.75	85.0	-	9.64	39.5	"
78.07	87.0	-	7.08	34	"
72.52	89.0	-	3.23	20	"
63.18	88.0	-	0	24	-
(1+1)					

 Trimethylcarbinol ($C_4H_{10}O$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.
100	92.5	-	44.7	-2.0
93.6	87.9	-	40.2	7.5
87.8	79	-	38.9	10.5
81.7	71	-	35.5	10.0
84.2	56.8	-	31.3	-5.5
66.5	36.5	-	28.5	+3.2
59.9	16	-	21.1	5.0
58.5	11.4	-3	13.8	11.2
58.1	+8	-3	7.2	17.1
54.3	-1.8	-	3.2	20.8
54.3	+0.7	-3	0	+23
49.9	+1.0	-		
48.6	+0.9	-		
			(2+1)	

 Trimethylcarbinol ($C_4H_{10}O$) + β -Naphthol ($C_{10}H_8O$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.	E
100	122	-	46.3	24	-
95.7	116	-	43.3	23.5	-
90.5	109.5	-	41.6	21.5	-
85.2	101.9	-	33.1	14	-
78.5	93.5	-	25.9	8	4
74.4	86	-	21.2	5	4
66.2	69	-	17.3	7.9	4
59.9	54.3	23	15.3	11.1	-
55.5	39.5	23	11.8	13.5	-
55.1	40	-	8.6	16	-
50.8	23.5	-	6.6	18	-
50.3	23.5	-	3.3	20.7	-
46.6	24	-	0	23	-
(2+1)					

Heptanol ($C_7H_{16}O$) + Phenol (C_6H_6O)		Decanol ($C_{10}H_{22}O$) + Thymol ($C_{10}H_{14}O$)	
Lecat, 1949		Lecat, 1949	
%	b. t.	%	b. t.
0	176.15	0	232.8
72	185.0 Az	58	234.7 Az
100	182.2	100	232.9
Octylalcohol ($C_8H_{18}O$) + Phenol (C_6H_6O)		Decanol ($C_{10}H_{22}O$) + o-Nitrophenol ($C_6H_5O_3N$)	
Lecat, 1949		Lecat, 1949	
%	b. t.	%	b. t.
0	195.2	0	232.8
8	195.4 Az	90	216.5 Az
100	182.2	100	217.2
Octylalcohol ($C_8H_{18}O$) + o-Bromphenol (C_6H_5OBr)		Tetradecanol ($C_{14}H_{30}O$) + m-Cresol (C_7H_8O)	
Lecat, 1949		Othmer, Savitt and al., 1949 (fig.)	
%	b. t.	mol% (at b. t.)	
0	195.2	L	V
50	204.0 Az	20	57
100	194.8	40	80
Octanol-2 ($C_8H_{18}O$) + Phenol (C_6H_6O)		60	90
Lecat, 1949		80	97
%	b. t.	Tetradecanol ($C_{14}H_{30}O$) + p-Cresol (C_7H_8O)	
0	180.4	Othmer, Savitt and al., 1949 (fig.)	
64	185.2 Az	mol% (at b. t.)	
100	182.2	L	V
Octanol-2 ($C_8H_{18}O$) + o-Chlorphenol (C_6H_5OCl)		20	43
Lecat, 1949		40	76
%	b. t.	60	88
0	180.4	80	95
25	183.5 Az		
100	175.7		

Glycol ($C_2H_6O_2$) + o-Cresol (C_7H_8O)

Kurtyka, 1956

Az : 26.0% (37.98 mol%) 189.52°

Glycol ($C_2H_6O_2$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b. t.)

L

V

20

22

27

27

40

35

60

52

80

78

Glycol ($C_2H_6O_2$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b. t.)

L

V

20

21

28

28

40

46

60

52

80

73

Lecat, 1949

Glycol ($C_2H_6O_2$) (b. t. = 197.4) + Phenols2nd comp.

Az

Name

Formula

b. t.

%

b. t.

Dt mix
or Sat. t.

o-Cresol

 C_7H_8O

191.1

73

186.9

4.5

m-Cresol

 C_7H_8O

202.2

25

-

+3.3

42

195.2

-

p-Cresol

 C_7H_8O

201.7

45

195.5

-

o-Xylénol as. $C_8H_{10}O$

226.8

11

197.2

-

Thymol

 $C_{10}H_{14}O$

232.9

40

195.5

-

Guaiacol

 $C_8H_8O_2$

205.05

54

190.4

-

Guethol

 $C_8H_{10}O_2$

216.5

37

193.0

-

Monomethyl-
resorcinol $C_7H_8O_2$

243.8

20

195.5

-

Eugenol

 $C_{10}H_{12}O_2$

254.8

10

196.8

-

o-Nitro-
phenol $C_6H_5O_3N$

217.2

51

189.35

-

Propoxyglycol ($C_5H_{12}O_2$) + Phenol (C_6H_6O)

Lecat, 1949

%

b. t.

0

151.35

90

182.65 Az

100

182.2

Propoxyglycol ($C_5H_{12}O_2$) + Ethylactate ($C_5H_{10}O_3$)

Lecat, 1949

%

b. t.

0

151.35

5

151.33 Az

100

154.1

Butoxyglycol ($C_6H_{14}O_2$) + Phenol (C_6H_6O)

Lecat, 1949

%

b. t.

0

171.15

63

186.35 Az

100

182.2

Butoxyglycol ($C_6H_{14}O_2$) + o-Cresol (C_7H_8O)

Lecat, 1949

%

b. t.

0

171.15

87

191.35 Az

100

191.1

Propylenglycol ($C_3H_8O_2$) + o-Nitrophenol
($C_6H_5O_3N$)

Lecat, 1949

%

b. t.

0

187.8

38

186.0 Az

100

217.2

Pinacol ($C_6H_{14}O_2$) + Phenol (C_6H_6O)

Lecat, 1949

%	b. t.
0	174.35
71	185.5 Az
100	182.2

Pinacol ($C_6H_{14}O_2$) + o-Cresol (C_7H_8O)

Lecat, 1949

%	b. t.
0	174.35
92	191.5 Az
100	191.1

Pinacol ($C_6H_{14}O_2$) + Propyl lactate ($C_6H_{12}O_3$)

Lecat, 1949

%	b. t.
0	174.35
~	170.5 Az
100	172.7

Pinacol ($C_6H_{14}O_2$) + Dichlorhydrin sym.
($C_3H_6OCl_2$)

Lecat, 1949

%	b. t.
0	174.35
45	173.6 Az
100	175.8

Lecat, 1949

Glycolmonoacetate ($C_4H_8O_3$) (b. t.=190.9) + Phenols.2nd comp. Az

Name	Formula	b. t.	%	b. t.	Dt mix.
Phenol	C_6H_6O	182.2	35	197.5	-
o-Cresol	C_7H_8O	191.1	51	199.45	-
m-Cresol	C_7H_8O	202.2	69	206.5	+3.5
p-Cresol	C_7H_8O	201.7	67	206.0	-
m-Xylenol as.	$C_8H_{10}O$	210.5	82	212.0	-

Diglycol ($C_4H_{10}O_3$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b. t.)

L	V
80	58
60	30
40	14
20	4

Diglycol ($C_4H_{10}O_3$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b. t.)

L	V
80	59
60	31
40	14
20	5

Lecat, 1949

Diglycol ($C_4H_{10}O_3$) (b.t.=245.5) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
Methoxy-triglycol	$C_7H_{16}O_4$	245.0	78	245.25	-
Thymol	$C_{10}H_{14}O$	232.9	87	232.25	33
Carvacrol	$C_{10}H_{14}O$	237.85	73	236.0	-
Pyrocatechol	$C_6H_6O_2$	245.9	54	259.5	-
o-Nitrophenol	$C_6H_5O_3N$	217.2	89.5	216.0	42
Methyl salicylate	$C_8H_8O_3$	222.95	84	220.55	-
Ethyl salicylate	$C_9H_{10}O_3$	233.8	70	225.15	66.5

Lecat, 1949

Ethoxydiglycol ($C_6H_{14}O_3$) (b.t.=201.9) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Phenol	C_6H_6O	182.2	36	208.0	
o-Cresol	C_7H_8O	191.1	30	205.5	
p-Cresol	C_7H_8O	202.7	50	209.0	

Butoxydiglycol ($C_8H_{18}O_3$) + Methylsalicylate
($C_8H_8O_3$)

Lecat, 1949

%		b. t.			
0		231.2			
78		220.7	Az		
100		222.95			

Butoxydiglycol ($C_8H_{18}O_3$) + Ethylsalicylate
($C_9H_{10}O_3$)

Lecat, 1949

%		b. t.			
0		231.2			
46		225.2	Az		
100		233.8			

Lecat, 1949

Dipropyleneglycol ($C_6H_{14}O_3$) (b.t.=229.2) + Phenols

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Methyl-salicylate	$C_8H_8O_3$	222.95	65	213.0	
Pyrocatechol	$C_6H_6O_2$	245.9	88	253.0	
Ethyl-salicylate	$C_9H_{10}O_3$	233.8	45	218.2	
o-Nitrophenol	$C_6H_5O_3N$	217.2	-	215.0	

Lecat, 1949

Methoxydiglycol ($C_7H_{12}O_3$) (b.t.=192.95) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	
Phenol	C_6H_6O	182.2	39	199.65	
o-Cresol	C_7H_8O	191.1	48	201.5	
p-Cresol	C_7H_8O	201.7	70	208.0	

Carbitol ($C_6H_{14}O_3$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b.t.)	
L	V
20	9.5
40	26
60	54
69	69
80	88

Carbitol ($C_6H_{14}O_3$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b.t.)	
L	V
20	10
40	29
60	56
65	65
80	85

Methylcarbitol ($C_5H_{12}O_3$) + m-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b.t.)	
L	V
20	10
40	25
60	57
66	66
80	86

Methylcarbitol ($C_5H_{12}O_3$) + p-Cresol (C_7H_8O)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b.t.)	
L	V
20	9
40	25
60	53
67	67
80	87

Triglycol ($C_6H_{14}O_4$) + Isoamylsalicylate
($C_{12}H_{16}O_3$)

Lecat, 1949

%	b. t.
0	288.7
70	269.0 Az
100	277.5

Methoxytriglycol ($C_7H_{16}O_4$) + Methylsalicylate
($C_8H_8O_3$)

Lecat, 1949

%	b. t.
0	245.25
92	222.0 Az
100	222.95

Methoxytriglycol ($C_7H_{16}O_4$) + Ethylsalicylate
($C_9H_{10}O_3$)

Lecat, 1949

%	b. t.
0	245.25
72	227.7 Az
100	233.8

Glycerol diethyl ether ($C_7H_{16}O_3$) + Phenol (C_6H_6O)

Paterno, 1896

%	D f. t.	%	D f. t.
99.78	-0.16	94.84	-3.34
99.39	0.39	93.19	4.82
98.79	0.73	89.96	8.12
98.10	1.14	88.95	8.92
97.13	1.77	85.73	-12.39
95.86	-2.63		

Glycerol ($C_3H_8O_3$) + Methylresorcinol ($C_7H_8O_2$)

Lecat, 1949

%	b. t.
0	243.8
7	242.2 Az
100	290.5

Glycerol ($C_3H_8O_3$) + Guethol ($C_8H_{10}O_2$)

Parvatiker and Mc Ewen, 1924

%	sat. t.
79.37	183.0
63.71	192.0
48.68	192.8
44.42	192.9
35.30	191.0

Glycerol ($C_3H_8O_3$) + Salicylic aldehyde ($C_7H_6O_2$)

Mc Ewen, 1923

%	Sat. t.	%	Sat. t.
95.60	106.5	48.32	176.5
91.38	143.5	41.82	175.5
77.02	170.5	26.54	165.5
58.67	176.5	13.30	148.5
58.67	176.5	5.36	91.5
52.22	176.6		

Glycerol ($C_3H_8O_3$) + Guaiacol ($C_7H_8O_2$)

Poppe, 1934

Homogeneous negative curve, around 63°;
separation in two layers for 1% water.

Erythritol ($C_4H_{10}O_4$) + Phenol (C_6H_6O)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
0	118	-	60	103.2	37
10	114.5	-	70	98	"
20	112	33	80	88	"
30	110	32	90	69	38
40	108	33	100	41	-
50	105.5	36			

Erythritol ($C_4H_{10}O_4$) + Resorcinol ($C_6H_6O_2$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
0	118	-	60	80	79
10	114	74	70	85	79
20	110	74	80	94	65
30	105	77.5	90	102.5	-
40	98	78	100	111	-
50	89.5	79			

Mannitol ($C_6H_{14}O_6$) + α -Naphthol ($C_{10}H_8O$)

Kofler and Brandstätter, 1942

%	f. t.
0	166
E	119

Lecat, 1949

Lactates + Phenol (b. t. = 182.2)

Name	Formula	b. t.	Az %	b. t.
Propyllactate	$C_6H_{12}O_3$	171.7	72	185.9
Isopropyllactate	$C_6H_{12}O_3$	166.8	80	184.5
Isobutyllactate	$C_7H_{14}O_3$	182.15	46	189.05

Isobutyryllactate (C ₇ H ₁₄ O ₃) + o-Cresol (C ₇ H ₈ O)							Ethyl tartrate (C ₈ H ₁₄ O ₆) + Phenol (C ₆ H ₆ O)											
Lecat, 1949							Patterson and Stevenson, 1910											
%		b. t.					t		d		t		d					
0		182.15					85.21%		76.15%									
74		193.5 Az					38.5		1.0787		21.4		1.1050					
100		191.1					45.4		.0725		37.9		.0903					
							66.4		.0539		58.2		.0721					
							78.8		.0431		78.1		.0538					
											99.8		.0332					
							51.8%		35.22%									
11.9		1.1404					11.9		1.1404		14.6		1.1665					
33.5		.1252					33.5		.1252		35.5		.1451					
46.5		.1133					46.5		.1133		55.8		.1261					
74.6		.0878					74.6		.0878		83.4		.0997					
99.2		.0640					99.2		.0640									
							25.61%		20.76%									
16.1		1.1755					16.1		1.1755		13.5		1.1837					
28.7		.1635					28.7		.1635		38.4		.1606					
42.0		.1499					42.0		.1499		58.4		.1412					
64.7		.1284					64.7		.1284		82.1		.1176					
Lecat, 1949							t											
Isoamyl lactate (C ₈ H ₁₆ O ₃) (b. t. = 202.4) + Phenols.							(α) _D		t		(α) _D							
2 nd comp.		Az					85.21%		76.15%									
Name	Formula	b. t.	%	b. t.			20		38.5		18.8		34.25					
Phenol	C ₆ H ₆ O	182.2	12	203.5			30.75		35.47		20		34.2					
o-Cresol	C ₇ H ₈ O	191.1	25	204.2			52.3		30.96		32.4		32.32					
m-Cresol	C ₇ H ₈ O	202.2	50	207.6			69.5		29.10		41.9		30.98					
p-Cresol	C ₇ H ₈ O	201.7	48	207.25			92.4		26.85		53.5		29.55					
m-Xylenol	C ₈ H ₁₀ O	210.5	70	212.2							65.5		28.42					
as.											96.9		25.7					
Methyl malate l (C ₆ H ₁₀ O ₅) + Salicylaldehyde											130.4		23.65					
(C ₇ H ₆ O ₂)							51.8%		35.22%									
Grossmann and Landau, 1910							19		23.99		20		17.05					
c		(α)					20		23.94		20.9		17.10					
red	yellow	green	pale blue	dark blue	viol.		39		23.44		64.9		18.38					
20°							65.2		22.62		100.3		18.78					
49.922	-6.21	-6.31	-7.51	-9.21	-9.61	-10.32	92.3		21.83		126		18.52					
24.961	-5.85	-6.77	-8.65	-10.74	-12.14	-	140.6		20.54									
12.4805	-5.44	-8.49	-9.86	-11.70	-13.46	-	25.61%		12.78		19.95		12.30					
4.965	-5.44	-7.25	-9.06	-10.88	-12.89	-	20		13.82		20		12.37					
2.4825	-5.24	-6.04	-7.25	-8.06	-10.88	-	53.5		15.60		55.5		14.62					
c= g malate in 100cc							76.5		16.38		87.1		15.90					
Methyl malate l (C ₆ H ₁₀ O ₅) + Ethyl salicylate							89.7		16.76		117.2		16.62					
(C ₉ H ₁₀ O ₃)							For 0%, see: Ethyl tartrate + Salicylic aldehyde											
Grossmann and Landau, 1910																		
c		(α)																
red	yellow	green	pale blue	dark blue	viol.													
20°																		
50.363	-5.42	-6.51	-7.60	-8.97	-9.67	-10.07												
25.1815	-5.24	-6.35	-7.43	-8.78	-9.45	-												
12.5908	-4.92	-5.96	-6.91	-8.18	-8.50	-												
4.854	-4.74	-5.77	-6.80	-7.42	-8.03	-7.83												
2.427	-4.53	-5.36	-6.59	-6.59	-6.18	-												

Ethyl tartrate ($C_8H_{14}O_6$) + Pyrocatechol
($C_6H_6O_2$)

Patterson and Stevenson, 1910

t	(α) _D
25.19%	
41.4	12.12
68.9	13.04
94.3	13.40
103.7	13.53

Ethyl tartrate ($C_8H_{14}O_6$) + Resorcinol ($C_6H_6O_2$)

Patterson and Stevenson, 1910

t	(α) _D
25.88%	
15.9	16.25
47.7	16.86
74.3	16.89
104.2	16.644

Ethyl tartrate ($C_8H_{14}O_6$) + Hydroquinone
($C_6H_6O_2$)

Patterson and Stevenson, 1910

t	(α) _D
25.53%	
70.3	18.1
105	17.5
136.5	16.53

Ethyl tartrate ($C_8H_{14}O_6$) + Pyrogallol ($C_6H_6O_3$)

Patterson and Stevenson, 1910

%	(α) _D
25.07%	
49.5	11.884
78.9	12.868
108.6	13.344

Ethyl tartrate ($C_8H_{14}O_6$) + Phloroglucinol
($C_6H_6O_3$)

Patterson and Stevenson, 1910

%	(α) _D
25.67%	
69.5	17.48
93.6	17.43
104.1	17.10

Ethyl tartrate ($C_8H_{14}O_6$) + α -Naphthol ($C_{10}H_8O$)

Patterson and Stevenson, 1910

%	(α) _D
74.76%	
105.6	7.276
121.5	6.732

Ethyl tartrate ($C_8H_{14}O_6$) + β -Naphthol ($C_{10}H_8O$)

Patterson and Stevenson, 1910

%	(α) _D
70.99%	
132.7	10.92
150	9.988

Ethyl tartrate ($C_8H_{14}O_6$) + Salicylic aldehyde
($C_7H_6O_2$)

Patterson, 1916

t	(α)	t	(α)
0%			
6980 Å		6708 Å	
-20.0	3.00	-21.0	3.02
0.0	5.07	0.0	5.17
15.5	6.39	15.5	6.64
38.55	8.01	38.55	8.35
59.4	9.21	59.4	9.57
96.25	10.49	96.0	11.05
114.9	10.93	115.1	11.51
133.3	11.30	133.4	11.87
159.1	11.58	159.5	12.11
194.2	11.62	192.5	12.28
223.5	11.58	223.5	12.07
6450 Å		6232 Å	
-23.0	2.60	-25.0	2.07
0.0	5.35	0.0	5.42
15.5	6.84	15.5	7.03
38.6	8.71	38.6	9.04
59.7	10.032	59.8	10.47
95.7	11.61	115.6	12.80
114.7	12.61	133.3	13.07
133.7	12.51	159.8	13.55
158.8	12.82	193.0	13.64
193.2	12.95	223.5	13.45
223.5	12.75		
5769 Å		5460 Å	
-22.0	1.86	-25.5	1.24
0.0	5.35	0.0	4.99
15.6	7.33	14.1	7.02
16.1	7.39	15.6	7.26
38.6	9.75	16.1	7.32
59.6	11.74	38.6	10.04
93.7	13.57	59.5	12.06
114.9	14.37	94.0	14.44
113.3	14.86	114.6	15.37
159.3	15.35	133.3	15.96
190.0	15.53	158.5	16.54
223.5	15.41	190.0	16.81
		223.5	16.71
4959 Å		4358 Å	
-27.0	-2.61	-24.5	-10.81
-23.0	-1.85	0.0	-3.10
-20.0	-0.76	16.1	+1.13
0.0	+3.31	38.6	6.14
15.5	6.18	59.6	9.95
38.6	9.78	94.5	14.63
59.8	12.35	114.9	16.46
94.9	15.60	133.3	17.82
115.0	16.77	159.8	19.28
133.3	17.63	191.6	20.43
159.1	18.45	223.5	20.81
194.0	19.02		
223.5	18.80		

t	d	t	d
0%			
-23.0	1.2484	96.0	1.1287
0.0	.2254	115.6	.1088
15.5	.2097	159.5	.0646
38.55	.1865	193.0	.0308
59.4	.1656	223.5	.0003
t	d	t	d
79.786%			
18.5	1.1752	71.3	1.1234
43.0	.1516	100.0	.0948
t	(α)	t	(α)
79.786%			
6907.5 Å		6234.4 Å	
19.8	20.33	19.7	23.87
32.1	20.027	32.2	23.496
61.1	19.81	61.1	22.97
79.45	19.136	79.5	22.36
114.2	18.228	114.2	21.223
5790.5 Å		5460.7 Å	
19.2	27.37	19.0	30.387
33.7	26.917	34.2	29.93
60.9	26.23	61.45	29.123
79.5	25.554	79.5	28.32
114.2	24.21	113.2	26.74
4959.7 Å		4358.3 Å	
19.55	35.75	19.4	43.52
32.7	35.22	33.9	42.39
61.1	34.425	61.1	40.93
79.5	33.29	79.5	39.34
114.2	31.57	114.2	37.094

Ethyl tartrate ($C_8H_{14}O_6$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Patterson and Stevenson, 1910

t	(α) _D
24.85%	
84.5	10.696
107	11.272
121.5	11.564

Ethyl tartrate ($C_8H_{14}O_6$) + o-Nitrophenol
($C_6H_5O_3N$)

Patterson and Stevenson, 1910

t	d	t	d	t	d
76.11%		48.88%		25.05%	
47.7	1.2603	56.8	1.2323	12.5	1.2558
65.9	.2416	78.2	.2086	27.1	.2385
78.1	.2295	97.3	.1878	49.4	.2164
				72.5	.1910

t	(α) _D	t	(α) _D	t	(α) _D
76.11%		48.88%		25.05%	
60.1	16.20	56.8	14.31	16	9.74
81.4	16.98	78.2	15.35	43.4	12.14
112.2	17.66	97.3	16.08	87.3	14.38
				115.1	14.21

For 0%, see: Ethyl tartrate + Salicylic aldehyde.

Ethyl tartrate ($C_8H_{14}O_6$) + m-Nitrophenol
($C_6H_5O_3N$)

Patterson and Stevenson, 1910

t	(α) _D
50.24%	
35.4	15.5
41.4	15.68
50.3	15.665
57.7	15.55

Ethyl tartrate ($C_8H_{14}O_6$) + p-Nitrophenol
($C_6H_5O_3N$)

Patterson and Stevenson, 1910

t	(α) _D	t	(α) _D
75.02%		52.14%	
105.9	11.262	72.6	17.624
120	10.646	94.5	16.878
		105.7	16.274

N.B. In some cases Patterson writes α instated
or (α) .

Ethanolamine (C_2H_7ON) + Phenol (C_6H_6O)

Dionisiev and Kosareva, 1955 (fig.)

mol%	f. t.	mol%	f. t.
100	41.5	40	0
80	23 E	29	-20 E
68	32	0	(+10)
50	15		(1+2)

mol%	d	mol%	d
	35°		45°
			55°
100	-	-	1.05
80	1.08	1.07	.06
60	.09	.08	.07
40	.08	.07	.06
20	.05	.04	.03
0	.02	.00	0.98

mol%	η	mol%	η
	35°		45°
			55°
100	-	-	3000
80	19000	13000	8000
60	56000	30000	20000
50	68000	33000	22000
30	48000	23000	12000
20	35000	18000	10000
0	13000	8000	5000

mol%	κ	mol%	κ
	35°		45°
			55°
90	3	5	7
70	13	20	23
50	18	23	30
30	20	25	30
10	18	22	28
0	0	0	0

mol%	f. t.	mol%	f. t.
0	10	50	60 (1+1)
10	-3	60	52
15	-9 E	65	50 E
20	+5	80	75
30	40	90	90
40	50	100	105

mol%	d	mol%	d
	70°		80°
			70°
			80°
0	0.99	0.98	50
10	1.02	1.01	60
20	1.08	1.06	70
30	1.12	1.10	80
40	1.16	1.14	

mol%				mol%			
70°		η		80°		κ	
80°		90°		90°		100°	
0	3000	2000	500	0	0	0	0
10	5000	3000	2000	10	30	40	45
20	12000	8000	5000	20	45	65	80
30	25000	14000	10000	30	40	55	78
40	41000	26000	17000	40	30	45	70
50	86000	60000	30000	50	20	30	55
60	68000	38000	20000	60	10	22	45
70	40000	20000	10000				
80	-	12000	7000				
85	-	-	6000				
mol%				Ethanolamine (C ₂ H ₇ ON) + Hydroquinone (C ₆ H ₆ O ₂)			
70°		κ		Dionisieva and Kosareva, 1956 (fig.)			
80°		90°		mol%		f. t.	
0	0	0	0	0	10	50	77 (1+1)
10	60	80	82	10	2	60	67 E
20	80	100	160	18	-2	70	122
30	80	100	130	25	-5 E	80	150
40	64	75	124	36	+50	90	160
50	45	80	115	40	62	100	172
60	40	70	110				
70	30	50	92				
80	20	45	80				
Ethanolamine (C ₂ H ₇ ON) + Resorcinol (C ₆ H ₆ O ₂)				mol%			
Dionisieva and Kosareva, 1956 (fig.)				90°		d	
mol%		f. t.		100°		110°	
0	10	50	60 (1+1)	0	1.0	0.9	0.8
10	4	55	53	10	1.03	1.02	1.0
15	0	60	38 E	20	1.06	1.05	1.02
20	-10	70	78	30	1.1	1.08	1.05
25	-15 E	80	74	40	1.14	1.12	1.10
30	+10	90	93	50	1.18	1.14	1.12
40	40	100	110	60	1.2	1.18	1.14
mol%				mol%			
80°		d		90°		η	
100°		80°		100°		110°	
0	1.0	0.90	40	0	2000	1000	500
10	.05	1.0	50	10	4000	3000	2000
20	.08	.05	60	20	7000	5000	4000
30	.12	.10		30	14000	10000	8000
				40	29000	14000	10000
				50	35000	24000	13000
				60	30000	22000	12000
mol%				mol%			
80°		η		90°		κ	
90°		100°		100°		110°	
0	2000	4500	200	0	0	0	0
20	4000	2000	1000	10	20	22	25
30	12000	8000	4000	20	26	40	48
40	35000	20000	10000	30	32	60	64
50	70000	30000	14000	40	60	74	80
60	65000	28000	12000	50	64	83	85
				60	58	80	83

Ethanolamine (C ₂ H ₇ ON) + o-Chlorphenol (C ₆ H ₅ OC1)			
Dionisiev and Kosareva, 1955 (fig.)			
mol%	f. t.	mol%	f. t.
100	7	50	80
90	71	30	60
80	81	6	-3
67	87.5	0	+10
(1+2)			
Ethanolamine (C ₂ H ₇ ON) + p-Chlorphenol (C ₆ H ₅ OC1)			
Dionisiev and Kosareva, 1955 (fig.)			
mol%	f. t.	mol%	f. t.
100	37	40	0
79 E	-7	20 E	-22
66.7	+17	0	+10
50	10		
(1+2)			
mol%	d		
	40°	50°	60°
100	1.25	1.23	1.22
80	1.24	1.22	1.21
60	1.23	1.21	1.20
40	1.17	1.15	1.14
20	1.12	1.10	1.08
0	1.02	1.01	0.99
mol%	η		
	40°	50°	60°
100	8000	4000	2000
80	20000	11000	9000
60	50000	26000	15000
50	58000	31000	19000
20	28000	16000	12000
0	10000	7000	4000
mol%	κ		
	40°	50°	60°
90	3	5	8
70	12	18	23
50	17	23	34
30	23	35	50
20	74	79	84
10	64	75	80
0	0	0	0

Chloral hydrate (C ₂ H ₃ O ₂ Cl ₃) + Salol (C ₁₃ H ₁₀ O ₃)			
Bellucci, 1912			
%	f. t.	E	min.
100	42	-	-
90	35	14	4
80	28.5	"	8
70	22	"	12
60	18	13.8	14
50	24	13.2	11
40	30	13.6	8.5
30	35	14	6
20	41	13.7	3
10	47	13.8	1
0	51.4	-	-
Cyclohexanol (C ₆ H ₁₂ O) + Phenol (C ₆ H ₆ O)			
Lecat, 1949			
%	b. t.		
0	160.8		
89	182.9 Az		
100	182.2		
Mascarelli and Pestalozza, 1908-09			
%	f. t.	%	f. t.
100.00	40.7	59.03	16.2
93.21	35.4	55.09	14.4
88.68	31.1	51.29	11.6
85.30	27.7	45.81	4.3
82.20	23.4	41.04	-1.6
79.33	19.5	37.41	-6.8
76.19	19.6	32.49	-16.8
73.15	19.8	29.05	-25.3
70.34	19.8	25.73	-34.3
68.59	19.4	8.01	-24.0
66.99	19.4	3.58	-1.4
64.23	18.6	0	+20.0 (1+1)
L C			
53.1	58.05		
44.01	45.95		

Hudlicky, 1949					
%	η	n_D			
25°					
0	46000	1.4646			
90	37100	1.4725			
20	27600	1.4802			
1,2-Methylcyclohexanol (C ₇ H ₁₄ O) + Phenol (C ₆ H ₆ O)					
Lecat, 1949					
%	b. t.				
0	168.5				
80	183.1 Az				
100	182.2				
Menthol (C ₁₀ H ₂₀ O) + Phenol (C ₆ H ₆ O)					
Friedrichs, 1919					
%	d	(α) _D	%	d	(α) _D
18°					
75	1.0297	-47.16	60	1.0013	-46.44
70	.0205	46.74	55	0.99252	46.39
65	.0112	46.51	50	0.98365	46.36
Menthol (C ₁₀ H ₂₀ O) + Eugenol (C ₁₀ H ₁₂ O ₂)					
Friedrichs, 1919					
%	d	(α) _D	%	d	(α) _D
18°					
90	1.0498	-48.96	65	1.00455	47.84
85	.0406	48.52	60	0.9959	47.73
80	.0314	48.30	55	.98718	47.63
75	.0234	48.13	50	.97884	47.56
70	.0134	47.98			

Lecat, 1949					
Menthol (C ₁₀ H ₂₀ O) (b. t. = 216.3) + Phenols.					
2 nd comp.			Az		
Name	Formula	b. t.	%	b. t.	Sat. t.
Guethol	C ₈ H ₁₀ O ₂	216.5	-	216.0	-
p-Chlor-phenol	C ₆ H ₅ OCl	219.75	57.5	223.5	-
o-Nitro-phenol	C ₆ H ₅ O ₃ N	217.2	46	212.1	35
Menthol (C ₁₀ H ₂₀ O) + Salol (C ₁₃ H ₁₀ O ₃)					
Bellucci, 1912					
%	f. t.	%	f. t.		
100	42	40	28.5		
90	34.5	30	30		
80	30.5	20	32.5		
70	28.5	10	35		
60	28	0	41.9		
50	28				
Adamani, 1933					
mol%	f. t.	mol%	f. t.		
100	42.0				
93.3	38.0	37.5	29.8		
86.8	35.8	32.8	30.5		
80.6	34.8	28.3	31.2		
74.5	33.8	23.9	32.0		
68.7	32.5	19.6	33.5		
63.1	31.5	15.5	34.5		
57.6	30.5	11.4	35.5		
52.3	29.5	7.5	37.0		
47.2	29.0	3.7	38.8		
42.3	29.0	0	42.5		
E: 45.2 mol%		28.5°			
Menthol (C ₁₀ H ₂₀ O) + Sesame oil (C ₇ H ₆ O ₃)					
Castiglioni, 1934					
%	d	η	%	d	η
20°					
100	0.9185	5247.0	85	0.9155	4404.2
95	.9176	4995.5	80	.9146	4109.5
90	.9166	4690.7	75	-	-

Menthol ($C_{10}H_{20}O$) + Quinine ($C_{20}H_{24}O_2N_2$)

Adamanis, 1933

mol%	f. t.	mol%	f. t.
100	175		
90.5	169.5	28.3	102.8
81.9	164.2	24.3	94.0
73.2	156.8	20.0	84.2
65.8	152.5	17.1	72.8
59.1	144.0	12.8	54.5
52.9	137.0	10.7	30.5
47.2	130.5	7.8	33.0
41.9	122.8	5.1	36.0
35.2	118.8	2.5	39.5
30.6	110.5	0	42.5

E: 12.0 mol% 28.0°

Citronellol ($C_{10}H_{20}O$) + Phenol (C_6H_6O)

Brauer, 1929

wt%	mol%	b. t.
	10 mm	
100	100	72.0
82	86.2	74.5
50	62.8	80.0
10	14.3	104.0
0	0	108.0

Citronellol ($C_{10}H_{20}O$) + Resorcinol ($C_6H_6O_2$)

Brauer, 1929

wt%	mol%	b. t.
	10 mm	
100	100	152.9
77	82.6	133.0
54	62.5	125.0
32	40.0	117.5
10	13.5	110.7
0	0.0	108.0

Citronellol ($C_{10}H_{20}O$) + Thymol ($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	224.4
75	233.8 Az
100	232.9

Citronellol ($C_{10}H_{20}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Lecat, 1949

%	b. t.
0	224.4
78	214.5 Az
100	217.2

Citronellol ($C_{10}H_{20}O$) + Eugenol ($C_{10}H_{12}O_2$)

Brauer, 1929

wt%	mol%	b. t.
	10 mm	
100	100	121.6
90	89.5	119.1
70	69.1	114.5
50	48.8	111.3
30	29.1	109.0
10	9.6	107.1 Az
0	0	108.0

Geraniol ($C_{10}H_{18}O$) + Thymol ($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	229.6
59	235.6 Az
100	232.9

Geraniol ($C_{10}H_{18}O$) + Carvacrol ($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	229.6
85	238.2 Az
100	237.85

α -Terpineol ($C_{10}H_{18}O$) + p-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.
0	218.85
51	225.7 Az
100	219.75

 α -Terpineol ($C_{10}H_{18}O$) + p-Ethylphenol ($C_8H_{10}O$)

Lecat, 1949

%	b. t.
0	218.85
58	219.7 Az
100	218.8

 β -Terpineol ($C_{10}H_{18}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Lecat, 1949

%	b. t.
0	210.5
22	209.0 Az
100	217.2

Stigmasterol ($C_{29}H_{48}O$) + Methyl-p-oxybenzoate
($C_8H_8O_3$)

Kofler and Brandstätter, 1942

%	f. t.
0	167
E	117

Stigmasterol ($C_{29}H_{48}O$) + β -Naphthol ($C_{10}H_8O$)

Kofler and Brandstätter, 1942

%	f. t.
0	167
-	100 E

Terpin hydrate ($C_{10}H_{22}O_3$) + Salol ($C_{13}H_{10}O_3$)

Angeletti, 1928

E: 97% 39°

Borneol ($C_{10}H_{18}O$) + p-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.	Sat. t.
0	215.0	-
55	222.5	-15 Az
100	219.75	-

Borneol ($C_{10}H_{18}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Lecat, 1949

%	b. t.	Sat. t.
0	215.0	-
40	211.8	123 Az
100	217.2	-

Benzyl alcohol (C_7H_8O) + Phenol (C_6H_6O)

Paterno, 1896

%	D f. t.
99.10	-0.59
97.68	1.52
96.07	2.61
93.89	4.22
90.54	6.77
83.21	13.28

Lecat, 1949

Benzyl alcohol (C_7H_8O) (b.t.=205.25) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Dt mix.
m-Cresol	C_7H_8O	202.2	37	206.6	3.0
p-Cresol	C_7H_8O	201.7	45	195.5	-
Guaiacol	$C_8H_8O_2$	205.05	57	204.35	-

Lecat, 1949

Benzyl carbinol ($C_8H_{10}O$) (b.t.=219.4) + Phenols.

2 nd comp.		Az			
Name	Formula	b. t.	%	b. t.	Sat. t.
p-Ethyl-phenol	$C_8H_{10}O$	218.8	55	220.5	-
p-Chlor-phenol	C_6H_5OCl	219.75	52.5	227.7	20
o-Nitro-phenol	$C_6H_5O_3N$	217.2	59	214.0	-

Phenylpropanol ($C_9H_{10}O$) + Thymol ($C_{10}H_{14}O$)

Lecat, 1949

%	b. t.
0	235.6
38	236.5 Az
100	232.9

Phenylpropanol ($C_9H_{10}O$) + Carvacrol ($C_{14}H_{14}O$)

Lecat, 1949

%	b. t.
0	235.6
58	238.5 Az
100	237.85

Benzhydrol ($C_{13}H_{12}O$) + Phenol (C_6H_6O)

Lang, 1912 and Schmidlin and Lang, 1912

%	f. t.	%	f. t.
0	65.9	44.8	48.8
5.1	61.3	50.2	49.5
10.5	56.8	56.3	48.8
14.8	52.2	65.4	46.0
20.2	45.7	74.9	41.4
23.4	43.1	79.1	38.6
27.9	42.4	83.0	36.9
28.9	42.8	85.5	35.4
31.3	43.6	86.1	35.0
33.7	44.2	88.2	33.5
34.3	45.3	91.9	33.9
39.6	47.5	96.5	38.7 (1+2)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	41.5	-	45.9	46.5	-
92.5	38	-	41.7	45	-
86.8	35	-	35.2	42	37
77.5	34	30	26.3	37	-
69.2	41.5	"	19.7	44	-
63.7	44	"	12.2	52.5	-
55.2	46.5	-	0	64.5	-
48.1	46.8	-			
(1+2)					

Benzhydrol ($C_{13}H_{12}O$) + Pyrocatechol ($C_6H_6O_2$)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100.0	103.5	-	36.5	67	55
85.0	98	-	28.8	61.5	"
73.6	92	-	18.9	55	"
62.7	85	55	9.0	60.5	-
51.2	77.0	-	0	64.5	-
44.2	72.5	-			

Benzhydrol ($C_{13}H_{12}O$) + Resorcinol ($C_6H_6O_2$)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	115	-	39.7	65	44.2
85.7	106	-	31.1	51	44.0
74.9	98.5	-	21.7	48	44.2
65.7	92	-	13.2	55.5	-
58.1	84.5	-	6.5	60	-
48.2	74	-	0	64.5	-

Benzhydrol ($C_{13}H_{12}O$) + Hydroquinone ($C_6H_6O_2$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.	E
100.0	169	46.5	140.5	58
89.9	165	34.4	130	-
81.2	161	25	120	-
74.4	158	16.5	108	58
67.0	154	7.3	91	58
59.4	150	4	75	-
53.9	147	0	64.8	-

Benzhydrol ($C_{13}H_{12}O$) + Pyrogallol ($C_6H_6O_3$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.
0	65	49.0	84.2
12.8	60	61.6	97.5
27.1	60	72.8	109
36.1	71	87.9	122.5
42.2	77	100.0	131
44.8	80		

E: 53°

Benzhydrol ($C_{13}H_{12}O$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.	E
100	95	49.1	51.5	18
92.0	90.5	39.7	31	"
83.8	85	28.7	30	"
73.7	77.5	21.9	40.5	-
66.3	71	13.5	50	-
60.4	66	6.2	58	-
50.2	53.5	0	64.5	-

Benzhydrol ($C_{13}H_{12}O$) + β -Naphthol ($C_{10}H_8O$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.	E
100	121	38.8	65	-
85.1	113	38.1	62	61
76.9	107	36.0	61.5	-
67.7	100.5	32.5	62	-
58.9	91.5	30.0	60	-
51.5	84	26.0	56	47
46.0	77	15.6	51.5	47
41.5	71	8.4	58.9	-
		0	64.5	-

(3+2)

Benzhydrol ($C_{13}H_{12}O$) + o-Nitrophenol ($C_6H_5O_3N$)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	44.5	-	51.9	36	-
94.1	43	-	45.0	40	29.0
84.0	39.5	-	37.8	44	29.0
73.9	35.5	-	28.5	49.5	-
65.0	32.0	29.0	20.6	54	-
57.9	32.0	29.0	10.3	60	-
			0	64.5	-

Benzhydrol ($C_{13}H_{12}O$) + m-Nitrophenol ($C_6H_5O_3N$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.
100	95	41.4	53
92.5	91	32.6	41
83.6	85.5	26.6	44
75.5	80.5	20.3	51
66.6	74	13.4	57
61.8	71	7.5	61.5
56.0	67	0	64.5
50.4	62		

E: 38°

Benzhydrol ($C_{13}H_{12}O$) + p-Nitrophenol ($C_6H_5O_3N$)

Kremann and Drazil, 1924

%	f. t.	%	f. t.
100	114.5	45.5	71.5
87.7	108	37.8	59
79.7	103	35.6	54
69.3	95	29.5	42
62.8	91	23.3	41.8
61.5	90	12.3	54
54.3	82	0	64.5
52.6	81		

E: 36°

Benzhydrol ($C_{13}H_{12}O$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	112.5	-	50.7	85.5	-
88.6	108	-	50.4	85	-
77.0	101	-	42.3	79.5	51
70.5	97.5	51	36.9	75.0	"
63.3	93.5	-	27.5	65	"
62.2	93	-	20.1	53	-
56.3	89	-	8.4	59	-
56.2	89	-	0	64.5	-

Benzhydrol ($C_{13}H_{12}O$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Drazil, 1924

%	f. t.	E	%	f. t.	E
100	121.5	-	46.0	113	-
93.4	119	-	43.5	110	-
83.7	124	113	36.8	96	-
79.6	128	-	30.7	85	-
75.6	130.5	-	23.3	70	54.5
72.4	131	-	20.6	65	-
65.8	130	-	11.7	57	-
59.1	127	-	0	64.5	-
56.0	124	-			
52.7	121.5	-			

(1+2)

Triphenylcarbinol ($C_{19}H_{16}O$) + Phenol (C_6H_6O)

Kremann and Wlk , 1919

%	f. t.	E	%	f. t.	E
0	159.3	-	54.5	75	-
13.1	137.5	-	59.1	68	-
23.9	122	-	64.7	58.2	-
34.6	108	-	73.5	41.9	-
37.2	103.9	-	82.4	34.5	32
43.2	93.8	-	90.1	37.8	-
48.7	85.5	32	95.9	39.8	-
51.3	80	-	100	41	-
51.4	80	-			

Triphenylcarbinol ($C_{19}H_{16}O$) + Pyrocatechol
($C_6H_6O_2$)

Kremann and Wlk , 1919

%	f. t.	E	%	f. t.	E
100	103	-	50.7	81.2	76
91.0	98	-	47.8	81.5	76
76.7	89.1	76	45.5	81	-
69.6	84	-	39.8	80	-
63.7	78.9	76	37.4	77.5	66
59.1	78	-	33.4	66	"
58.3	78.1	76	31.1	92	-
56.9	79.2	"	25.4	115.5	66
55.2	80	"	16.8	140	"
54.7	80	"	6.4	155	-
53.5	81	"	0	159.2	-
51.7	81.1	-			

(1+2)

Triphenylcarbinol ($C_{19}H_{16}O$) + Hydroquinone
($C_6H_6O_2$)

Kremann and Wlk , 1919

%	f. t.	E	%	f. t.	E
100	169	-	48.3	150.9	145
88.4	166.5	-	46.3	151.4	-
84.4	165	-	46.2	151.6	-
76.7	162.2	-	42.8	150.9	-
70.7	159.1	-	38.0	149.9	-
65.5	156.2	-	34.1	148.2	-
63.1	154.2	145	30.0	147	-
56.5	150.1	-	25.2	144.5	139.8
56.4	150	145	22.3	142.6	-
55.2	149.1	139.8	16.9	141.5	"
53.8	147.2	145	13.8	143.9	-
51.1	148	-	8.5	149.1	139.8
49.6	150.2	139.8	0	159.2	-

(1+2)

Triphenylcarbinol ($C_{19}H_{16}O$) + Resorcinol($C_6H_6O_2$)

Kremann and Wlk, 1919

%	f. t.	E	%	f. t.
100	108.9	-	40.2	102
89.6	103	-	37.7	105
86.3	99.2	-	34.7	109
75.6	97	-	31.9	113
71.3	95.5	95.5	29.8	116
64.8	97	86.0	27.6	120
64.5	97	-	24.5	126
61.2	96.1	86.0	21.6	128
58.9	94.2	"	19.7	133
56.5	92.3	"	15.3	139
53.9	94	"	14.3	138
51.4	183.5	-	11.7	143.5
50.5	94.2	86.0	7.2	148
48.5	189.9	-	7.0	145.9
47.5	92	-	1.9	155.5
45.2	130	-	0	159.3

Triphenylcarbinol ($C_{19}H_{16}O$) + Pyrogallol
($C_6H_6O_3$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
100	132.0	35.5	91.0
89.3	121.0	33.2	86.5
82.0	113.0	26.6	86.0
70.4	101.5	23.9	92.0
60.2	88.5	19.5	103.0
55.1	82.5	16.7	113.0
49.8	79.0	12.0	128.0
45.1	94.0	7.2	140.0
39.6	96.0	3.2	151.0
39.5	96.0	0.0	159.0
35.7	96.0		

(2+3)

Triphenylcarbinol ($C_{19}H_{16}O$) + o-Nitrophenol
($C_6H_5O_3N$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
0.0	159.5	56.8	104.0
6.0	154.0	62.7	96.5
9.8	150.6	69.7	87.0
17.6	143.0	74.4	80.0
22.4	138.5	82.2	66.5
28.8	132.5	88.0	51.0
34.1	126.0	92.4	42.0
40.0	120.5	94.6	42.7
44.7	116.0	100.0	44.7
51.7	109.1		

Triphenylcarbinol ($C_{19}H_{16}O$) + m-Nitrophenol
($C_6H_5O_3N$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
100	95.5	45.8	115.0
95.2	94.0	42.9	120.0
87.7	91.0	38.3	126.0
83.0	89.0	33.0	132.5
76.0	87.0	32.4	133.0
68.3	84.0	28.6	138.0
62.1	85.0	22.8	142.5
55.4	96.0	13.4	150.0
49.6	106.0	0.0	159.0

Triphenylcarbinol ($C_{19}H_{16}O$) + p-Nitrophenol
($C_6H_5O_3N$)

Kremann, Hohl and Müller, 1921

%	f. t.	%	f. t.
0.0	159.5	52.6	107.0
6.1	153.2	58.1	102.0
11.2	147.8	62.0	98.5
16.6	143.0	68.6	99.0
19.8	139.5	73.6	101.5
24.5	134.5	79.4	103.3
28.5	131.5	84.2	105.0
31.8	129.0	88.8	107.0
36.8	124.0	92.1	108.0
41.1	120.0	97.2	110.0
44.4	115.5	100.0	111.5
48.7	110.8		

Triphenylcarbinol ($C_{19}H_{16}O$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann, Mauermann and al., 1923

%	f. t.	%	f. t.
100.0	111.0	54.34	121.0
95.70	109.0	53.11	121.0
90.35	106.5	46.34	126.0
85.39	103.4	42.89	129.0
80.97	100.5	32.89	136.5
76.98	103.5	17.14	147.0
69.78	109.0	4.85	155.5
62.58	114.5	0.0	159.0

 $E_1 : 100.5^\circ$

Triphenylcarbinol ($C_{19}H_{16}O$) + Picric acid ($C_6H_3O_7N_3$)					Furfuryl alcohol ($C_5H_6O_2$) + Phenol (C_6H_6O) Lecat, 1949		
Kremann, Hohl and Müller, 1921							
%	f. t.	%	f. t.		%	b. t.	
100.0	122.0	45.7	138.5		0	169.35	
94.8	120.0	44.3	137.0		70	187.0 Az	
84.8	115.0	41.2	135.0		100	182.2	
67.7	121.5	36.9	129.0				
62.7	126.5	27.6	133.0		Benzaldoxime anti (C_7H_7ON) + Ethyl tartrate		
57.2	131.5	19.3	152.0		Patterson and McMillan, 1907 ($C_8H_{14}O_6$)		
55.2	134.0	9.1	150.5		T	d	(α)D
49.7	137.0	0.0	159.0		18	0%	
48.8	138.0				22	1.11232	-
(1+1)					26	1.10854	-
					26	1.10573	-
					38	1.0957	-
						10.372 %	
					21.5	1.11976	-
					26.0	1.1160	- 7.26
					27.5	1.11483	-
					33.6	1.1096	-
					37.0	1.1065	- 3.38
					40.5	1.1037	-
					44.5	1.1003	-
					56.1	1.0905	+ 1.07
					78.5	1.0710	+ 6.30
					96.0	1.0565	+ 9.31
					109.0	1.0456	+11.43
					122.5	1.0392	+13.08
					134.0	1.0245	-14.30
						22.819%	
					16.0	1.1365	-0.37
					17.5	1.1352	0.22
					22	1.1313	-
					26.1	1.1274	1.33
					28.0	1.1261	-
					34.5	1.1204	-
					38.0	1.1168	3.36
					41.2	1.1140	3.93
					45	1.1112	-
					54.75	1.1027	-
					56.4	1.1101	6.58
					68.1	1.0905	8.73
					77.7	1.0823	-
					82.3	1.0780	10.80
					96.0	1.0660	12.45
					117.5	1.0484	14.69
						49.6228 %	
					14.3	1.1640	10.58
					13.8	1.1644	10.51
					18	1.1605	-
					20.5	1.1582	10.94
					22.0	1.1565	-
					28.75	1.1504	-
						79.90%	
					15.9	1.1938	12.71
					16.4	1.1932	12.85
					41.2	1.1680	13.79
					44.6	1.1647	-
					47.5	1.1616	-
					54.8	1.1539	-
					61.3	1.1474	14.52
					64.75	1.1443	-
					74.0	1.1348	-
					79.5	1.1285	15.52
					94.4	1.1130	16.26
					For 100 %, see : Methyl alcohol + Ethyl tartrate		

Acetoxime (C_3H_7ON) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.72	-0.155	89.13	-6.26
97.79	1.19	87.17	7.485
94.61	2.93	83.17	10.21
91.11	5.01		

Camphoroxime-d ($C_{10}H_{17}ON$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.13	-0.207	84.03	-3.895
96.96	0.725	80.18	4.950
92.89	1.680	76.22	6.090
88.79	2.690		

Benzaldoxime (C_7H_7ON) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.55	-0.157	89.01	-3.905
97.54	0.850	83.46	6.040
94.13	2.020	78.18	8.215

Benzaldoxime ethyl ether ($C_9H_{11}ON$) + Acetic acid
($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.
99.18	-0.245
96.24	1.085
91.91	2.320
85.56	4.135
82.01	5.170

Methyl alcohol (CH_4O) + Formic acid (CH_2O_2)
Hartwig, 1888, 1891

%	d 18°	0°	n 18°	30°
100	1.2198	-	-	-
66.87	.0266	4.380	5.595	6.266
38.12	0.9241	1.299	1.795	2.127
24.30	.8727	1.033	1.250	1.594
19.08	.8553	0.770	1.019	1.165
9.81	.8283	-	-	-
4.86	.8119	0.240	0.344	0.445
0	.7937	-	-	-

Methyl alcohol (CH_4O) + Acetic acid ($C_2H_4O_2$)

Pickering, 1893

%	f. t.	%	f. t.
100	16.63	66.569	- 23.87
96.186	12.36	66.569	25.07 sic
92.276	8.19	61.868	30.37
88.265	4.24	57.036	36.87
84.152	- 0.12	52.064	44.57
79.889	4.98	52.064	44.57
75.594	10.06	46.949	55.57 sic
71.142	16.27	41.686	76.17
66.569	-24.17		

Hartwig, 1888 and 1891

%	d 18°	0°	n 18°	30°	$\tau \cdot 10^3$
100	1.0582	-	-	-	-
50.5	0.9167	0.112	0.191	0.218	59.3
33.55	.8785	0.138	0.227	0.289	31.2
20.27	.8427	0.150	0.225	0.296	23.8
6.44	.8103	0.128	0.175	0.221	14.7
0	.7941 (19°)	-	-	-	-

Timofeev, 1905

initial	% final	Q mix (by mole alcohol)
100	96.0	-221
96.0	91.4	-38.2
91.4	87.6	+46.8
87.6	84.2	+78.1
58.4	56.1	+50.1
(by mole acid)		
0	7.5	+181
7.5	15.7	+158
15.7	22.2	+146

Methyl Alcohol (CH_3O) + Propionic acid ($\text{C}_3\text{H}_6\text{O}_2$)

Baume and Pamfil, 1914

%	mol%	f. t.	%	mol%	f. t.
0	0	-94.4	50.48	30.6	-57.3
5.15	2.3	-95.9	55.13	34.7	-54.0
8.79	4.0	-97.7	58.22	37.6	-52.7
10.56	4.9	-90.3	68.61	48.6	-44.9
15.40	7.3	-85.9	75.02	56.5	-38.6
16.17	7.7	-84.7	80.02	63.4	-34.2
20.62	10.1	-81.4	85.11	71.2	-30.0
31.05	16.3	-68.2	90.57	80.6	-26.9
33.51	17.9	-65.7	96.71	92.7	-22.4
40.44	22.7	-63.0	100	100	-19.5
43.92	25.3	-59.0			

Methyl alcohol (CH_3O) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)

Hartwig, 1888-1891

%	d		n		$\tau \cdot 10^3$
	18°	0°	18°	30°	
100	0.9620	-	-	-	-
43.66	.8623	0.062	0.092	0.122	23.3
23.27	.8346	.065	.098	.126	29.4
11.88	.8159	.074	.102	.126	12.5
0	.7937	-	-	-	-

Methyl alcohol (CH_3O) + Caprylic acid ($\text{C}_8\text{H}_{16}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
36.8	0
92.9	10
100	16.30

Methyl alcohol (CH_3O) + Pelargonic acid ($\text{C}_9\text{H}_{18}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
83.6	0
97.9	10
100	12.25

Methyl alcohol (CH_3O) + Capric acid ($\text{C}_{10}\text{H}_{20}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
44.4	0
64.3	10
83.6	20
99.0	30
100.0	31.24

Methyl alcohol (CH_3O) + Undecanoic acid
($\text{C}_{11}\text{H}_{22}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.
51.2	0
70.2	10
88.1	20
100	28.13

Methyl alcohol (CH_3O) + Lauric acid ($\text{C}_{12}\text{H}_{24}\text{O}_2$)

Timofeev, 1894

%	f. t.
14.8	0
58.6	21

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
11.3	0	79.3	30
29.1	10	95.7	40
54.6	20	100	43.92

Methyl alcohol (CH_3O) + Tridecanoic acid
($\text{C}_{13}\text{H}_{26}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
11.2	0	83.7	30
32.7	10	99.3	40
59.7	20	100	41.76

Methyl alcohol (CH_3O) + Myristic acid ($\text{C}_{14}\text{H}_{28}\text{O}_2$)

Timofeev, 1894

%	f. t.
2.81	0
21.2	21
59.2	31.5

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
2.7	0	77.8	40
5.5	10	96.4	50
14.8	20	100.0	54.15
42.9	30		

Methyl alcohol (CH_3O) + Pentadecanoic acid
($\text{C}_{15}\text{H}_{31}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
2.1	0	80.0	40
4.8	10	97.2	50
14.1	20	100.0	52.54
42.9	30		

Methyl alcohol (CH_3O) + Palmitic acid ($\text{C}_{16}\text{H}_{32}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.8	0	43.5	40
1.2	10	87.7	50
3.6	20	97.9	60
11.8	30	100.0	62.82

Methyl alcohol (CH_3O) + Margaric acid ($\text{C}_{17}\text{H}_{34}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.1	0	39.3	40
0.7	10	83.3	50
2.4	20	99.2	60
9.0	30	100.0	60.94

Methyl alcohol (CH_3O) + Stearic acid ($\text{C}_{18}\text{H}_{36}\text{O}_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.1	20	43.8	50
1.8	30	83.9	60
10.5	40	100.0	69.32

Methyl alcohol (CH_3O) + Erucic acid ($\text{C}_{22}\text{H}_{42}\text{O}_2$)

Timofeev, 1894

%	f. t.
2.25	-2
60.4	+18
62.0	+21.4
100.0	+34

Methyl alcohol (CH_3O) + Oleic acid ($\text{C}_{18}\text{H}_{34}\text{O}_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
0.3	-40	24.0	-10
0.9	-30	71.4	0
3.9	-20	94.8	+10
		100	13;38

Dennhardt, 1899

%	t	d		α			τ
				8°	25°	30°	25°
4.49	21	0.8152	0.0827	0.0915	0.093	0.014	
18.40	18	.8127	.341	.3732	.3986	.012	
36.00	22	.8270	.1534	.177	.190	.019	
52.20	22	.8445	.0590	.0590	.0794	.026	

Methyl alcohol (CH_3O) + Linoleic acid ($\text{C}_{18}\text{H}_{32}\text{O}_2$)

Hoerr and Harwood, 1952

%	f. t.
3.2	-50
9.0	-40
32.5	-30
70.0	-20
94.9	-10
100.0	-5.3

Methyl alcohol (CH_4O) + Oxalic acid ($\text{C}_2\text{H}_2\text{O}_4$)

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ	mol%	d	σ
12°					
0	0.797	23.30	4.43	0.852	25.07
0.80	.809	23.65	7.43	.888	25.32
2.22	.824	24.17	12.0	.940	28.28

Methyl alcohol (CH_4O) + Malonic acid ($\text{C}_3\text{O}_4\text{H}_4$)

Timofeev, 1894

%	f. t.	%	f. t.
42.7	-18.5	52.5	+19
43.5	-15	53.3	+19.5
47.3	0	100	132

Methyl alcohol (CH_4O) + Succinic acid ($\text{C}_4\text{H}_6\text{O}_4$)

Timofeev, 1894

%	f. t.	%	f. t.
9.5	-1	22.30	+39
16.1	+20	100	185
16.46	+23		

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ
20°		
0	0.791	23.01
1.10	.803	23.39
2.30	.819	23.78
4.02	.841	24.37

Methyl alcohol (CH_4O) + Malic acid ($\text{C}_4\text{H}_6\text{O}_5$)

Timofeev, 1894

%	f. t.
55.5	0
62.1	18.8
63.5	19.0
62.4	19.5
100.0	100

Nasini and Gennari, 1895

%	d
20°	
15.830	0.89415
25.000	0.94520
52.420	1.08603

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ
20°		
0.00	0.791	23.01
1.63	.819	23.73
4.21	.861	24.81
8.13	.918	26.13

Nasini and Gennari, 1895

%	(α)				
	red	D	green	pale blue	dark blue
20°					
15.830	-7.17	-8.76	-10.88	-11.33	-11.72
25.000	-5.39	-6.98	-8.14	-8.88	-
52.420	-0.85	-0.65	+0.30	+0.33	+1.70

Methyl alcohol (CH_4O) + Tartaric acid ($\text{C}_4\text{H}_6\text{O}_6$)

Timofeev, 1894

%	f. t.
40.3	-3
41.2	+19.2
42.3	+23
43.6	+39

Methyl alcohol (CH_3O) + Benzoic acid ($\text{C}_7\text{H}_6\text{O}_2$)

Timofeev, 1894

%	f. t.	%	f. t.
23.1	-18	40.1	+19.2
24.3	-13	41.7	+23
33.5	+3		

Vandenberghe, 1903

%	D b. t.
6.54	+0.47
13.04	1.032
18.03	1.507
2.91	0.16
5.66	0.41
9.09	0.655
8.26	0.62
17.35	1.425
23.67	2.05
5.66	0.37
12.28	0.905
20.00	1.705
6.54	0.68
15.25	1.405
21.26	1.94

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ	mol%	d	σ
12°					
0	0.797	23.30	4.53	0.842	24.86
1.39	.812	23.73	7.56	.869	25.90
2.69	.824	24.09	11.16	.898	26.77

Chatterji and Bose, 1950

%	25°	30°	κ	40°	45°
41.9	-	-	0.04689	-	0.05447
43.7	0.03769	0.04066	.04393	0.04790	.05156
45.2	-	-	.04276	-	.04933
47.5	-	-	.03981	-	.04652
48.8	-	-	.03795	0.04123	.04430

Methyl alcohol (CH_3O) + Phenylacetic acid
($\text{C}_8\text{H}_8\text{O}_2$)

Timofeev, 1894

%	f. t.	%	f. t.
50.6	-17	70.8	+19.4
53.2	-13	71.8	28
59.2	0	100	76

Methyl alcohol (CH_3O) + Phenylpropionic acid
($\text{C}_9\text{H}_{10}\text{O}_2$)

Timofeev, 1894

%	f. t.	%	f. t.
55.8	-18.5	82.8	+19.6
57.6	-16.0	83.8	20
66.9	0	100	47

Methyl alcohol (CH_3O) + Cinnamic acid ($\text{C}_9\text{H}_8\text{O}_2$)

Timofeev, 1894

%	f. t.	%	f. t.
8.1	-18.0	22.4	+19.5
9.3	-12.5	100	133
13.0	0		

Chatterji and Bose, 1950

%	25°	30°	κ	40°	45°
16.1	0.09268	-	-	-	0.1228
21.1	.08537	-	-	-	.1151
25.1	.08018	0.0872	0.0939	0.1009	.1152
28.8	.07390	.0805	.0879	.0942	.1018

Methyl alcohol (CH_3O) + Salicylic acid ($\text{C}_7\text{H}_6\text{O}_3$)

Vandenberghe, 1903

%	D b. t.
7.4	+0.49
13.8	0.975
20.6	1.58
13.0	0.92
19.4	1.46
14.5	0.995
23.1	1.86

Timofeev, 1894

%	f. t.
28.4	-3
30.2	0
37.6	+19.2
39.2	+23

Chatterji and Bose, 1950

%	25°	30°	κ 35°	40°	45°
34.6	-	0.03470	-	-	0.04398
37.0	-	.03392	-	-	.04310
39.2	0.03020	.03310	0.03642	0.03902	.04230
40.7	-	.03271	-	-	.04172
42.6	-	.03178	0.03475	0.03780	.04077

Methyl alcohol (CH_3O) + Mandelic acid ($\text{C}_8\text{H}_8\text{O}_3$)

Timofeev, 1894

%	f. t.
51.1	0
69.9	16.5
100	118

Methyl alcohol (CH_3O) + Phthalic acid ($\text{C}_8\text{H}_6\text{O}_4$)

Timofeev, 1894

%	f. t.
15.1	-2
19.5	+19
20.4	21.4
19.8	22

Chatterji and Bose, 1950

%	25°	30°	κ 35°	40°	45°
16.3	-	0.4539	-	-	0.6290
21.7	0.4133	.4677	0.5270	0.5947	.6540
25.6	-	.4617	-	-	.6540
30.7	-	-	0.5045	0.5630	.6306

Methyl alcohol (CH_3O) + o-Aminobenzoic acid
($\text{C}_7\text{H}_7\text{O}_2\text{N}$)

Chatterji and Bose, 1950

%	30°	κ 35°	40°	45°
26.4	-	0.5845	-	0.6247
29.8	-	.6247	-	.6543
34.9	0.6247	.6533	0.6724	.6983
37.7	-	.6627	-	.7080
40.6	-	-	0.6860	.7112

Methyl alcohol (CH_3O) + o-Nitrobenzoic acid
($\text{C}_7\text{H}_5\text{O}_4\text{N}$)

Timofeev, 1894

%	f. t.
36.2	0
51.3	22

Chatterji and Bose, 1950					
%	25°	30°	n	40°	45°
36.4	0.4578	-	-	-	0.6053
45.0	.4456	0.4820	0.5196	0.5570	.5940
51.5	.4190	.4210	.4594	.4922	.5624
53.1	.3908	-	-	-	.5256
Methyl alcohol (CH ₃ O) + m-Nitrobenzoic acid (C ₇ H ₅ O ₄ N)					
Timofeev, 1894					
%	f. t.				
41.9	0				
53.5	19				
57.1	21.5				
100	141				
Chatterji and Bose, 1950					
%	25°	30°	n	40°	45°
22.3	0.1526	-	-	-	0.2178
35.7	.1570	-	-	-	.2270
42.2	.1456	0.1615	0.1801	0.1978	.2172
47.2	.1362	-	-	-	.2042
50.5	.1271	0.1758	0.1596	0.1426	.1924
Methyl alcohol (CH ₃ O) + Camphoric acid (C ₁₀ H ₁₆ O ₄)					
Timofeev, 1894					
%	f. t.				
53.8	0				
56.7	22.5				
100	187				

Ethyl alcohol (C ₂ H ₆ O) + Formic acid (CH ₂ O ₂)					
Landolt, 1865					
%	d		n _D		
20°					
0	0.8011	1.3606			
50	.9602	.3610			
100	1.2211	.3693			
Hartwig, 1888					
%	0°	n	30°	τ. 10 ³	
1.91	-	0.073	-	-	
5.05	0.070	.099	0.123	20.0	
9.52	.125	.171	.203	21.0	
15.20	.221	.312	.379	20.8	
18.24	.335	.466	.537	20.2	
22.09	.541	.714	.844	20.1	
27.72	.850	1.080	1.239	17.1	
63.96	4.209	5.054	5.557	15.3	
Ethyl alcohol (C ₂ H ₆ O) + Acetic acid (C ₂ H ₄ O ₂)					
Pickering, 1893					
%	f. t.		%	f. t.	
100	16.626	64.225	-13.51		
98.824	15.67	62.150	-15.68		
97.752	14.83	59.508	-18.04		
96.491	13.80	56.578	-21.71		
95.396	13.07	53.576	-25.47		
94.056	12.02	51.526	-28.47		
91.813	10.32	49.024	-32.57		
88.687	8.02	46.757	-35.47		
85.676	5.35	44.489	-39.47		
82.730	3.09	41.732	-42.37		
79.835	0.71	38.785	-48.87		
77.091	-1.54	36.924	-50.92		
74.535	-3.99	34.118	-57.97		
71.765	-6.21	31.959	-63.27		
69.174	-8.59	28.511	-69.27		
66.773	-10.21	26.414	-74.97		
Hartwig, 1888					
%	d		%	d	
18°					
100	1.0582	25.00	0.8519		
75.7	0.9796	6.29	0.8080		
47.06	0.9047	0	0.7937		

Hammick and Andrew, 1929				
mol%	d	mol%	d	
25°				
0.00	0.7898	55.50	0.9384	
22.62	.8540	74.14	0.9863	
42.41	.9062	100.00	1.051	
Drutman, 1955				
mol%	d			
	0°	20°	40°	60°
100	-	1.052	1.028	1.008
93.22	-	.036	.017	0.9957
89.96	-	.032	.008	.9872
87.05	1.042	.021	.002	.9813
84.42	.036	.017	0.9965	.9750
83.00	.033	.013	.9942	.9720
81.07	.028	.008	.9862	.9660
71.76	.005	.9900	.9665	.9425
68.20	0.9940	.9760	.9548	.9342
64.50	.9852	.9663	.9453	.9250
61.28	.9773	.9562	.9392	.9163
56.94	.9665	.9510	.9270	.8990
50.59	.9454	.9227	.9083	.8906
45.87	.9340	.9176	.9004	.8750
39.25	.9143	.9000	.8782	.8603
30.31	.8912	.8742	.8550	.8360
20.12	.8637	.8475	.8280	.8104
10.04	.8372	.8183	.8045	.7876
0	.8080	.7930	.7750	.7592
N.B. For data after reaction, see author				

Hartwig, 1888				
%	η			$\tau \cdot 10^3$
	0°	18°	30°	
100	-	-	-	-
75.7	-	0.0269	-	12.1
47.06	0.0224	.0331	0.0448	30.3
25.00	.0177	.0276	.0345	31.6
6.29	.0106	.0179	.0223	29.1
Timofeev, 1905				
%	U			
	20°			
100	-	0.487	-	-
85.6	-	.499	-	-
74	-	.506	-	-
0	-	.5933	-	-
% initial		final	Q mix (by mole alcohol)	
100	-	95.1	-	-410
95.1	-	90.6	-	-258
90.6	-	86.8	-	-167
50.4	-	47.8	-	+106
Longtin, 1942 (fig.)				
mol%	Q mix	mol%	Q mix	
23°				
10	- 5.95	60	-47.6	
20	-11.9	70	-54.3	
30	-17.8	80	-52.3	
40	-23.9	90	-35.7	
50	-35.7			
Ethyl alcohol (C ₂ H ₆ O) + Butyric acid (C ₄ H ₈ O ₂)				
Hartwig, 1888				
%	d	η		$\tau \cdot 10^3$
		0°	18°	30°
100	0.9620	-	-	-
41.46	.8626	0.00815	0.0122	0.0161
23.30	.8331	.00931	.0154	.0192
12.01	.8142	.00878	.0139	.0187
0	.7937	-	-	-

ETHYL ALCOHOL + CAPRYLIC ACID

1053

Ethyl alcohol (C ₂ H ₆ O) + Caprylic acid (C ₈ H ₁₆ O ₂)		Ethyl alcohol (C ₂ H ₆ O) + Lauric acid (C ₁₂ H ₂₄ O ₂)			
Ralston and Hoerr, 1942		Timofeev, 1894			
%	f. t.	%		f. t.	
72.4	0	20.5		0	
91.2	10	57.3		21	
100	16.30				
Ethyl alcohol (C ₂ H ₆ O) + Pelargonic acid (C ₉ H ₁₈ O ₂)		Ralston and Hoerr, 1942			
%	f. t.	%	f. t.	%	f. t.
79.7	0	16.9	0	74.5	30
97	10	29.4	10	93.9	40
100	12.24	51.2	20	100.0	43.86
Ethyl alcohol (C ₂ H ₆ O) + Capric acid (C ₁₀ H ₂₀ O ₂)		Ekwall and Mylius, 1933			
%	f. t.	%		f. t.	
79.7	0	17.2		0	
97	10	26.5		+8	
100	12.24	32.6		12	
		42.1		16.5	
Ethyl alcohol (C ₂ H ₆ O) + Undecanoic acid (C ₁₁ H ₂₂ O ₂)		Ethyl alcohol (C ₂ H ₆ O) + Tridecanoic acid (C ₁₃ H ₂₆ O ₂)			
Ralston and Hoerr, 1942		Ralston and Hoerr, 1942			
%	f. t.	%	f. t.	%	f. t.
37.7	0	13.4	0	77.1	30
48.3	10	25.6	10	98.5	40
81.5	20	51.0	20	100.0	41.76
99	30				
100	30.92				
Ethyl alcohol (C ₂ H ₆ O) + Myristic acid (C ₁₄ H ₂₈ O ₂)		Ralston and Hoerr, 1942			
Ralston and Hoerr, 1942		Ralston and Hoerr, 1942			
%	f. t.	%	f. t.	%	f. t.
46.0	0	6.6	0	72.5	40
65.5	10	8.9	10	94.0	50
87.6	20	19.3	20	100.0	53.78
100	28.13	45.9	30		

1054

ETHYL ALCOHOL + PENTADECANOIC ACID

Ethyl alcohol(95%) (C_2H_6O) + Pentadecanoic acid
($C_{15}H_{31}O_2$)

Ralston and Hoerr, 1942

%	f. t.	%	f. t.
3.7	0	74.7	40
6.7	10	96.1	50
16.3	20	100.0	52.49
44.0	30		

Ethyl alcohol(99.4%) (C_2H_6O) + Palmitic acid
($C_{16}H_{32}O_2$)

Ralston and Hoerr, 1942

%	f. t.	%	f. t.
1.85	0	48.5	40
3.1	10	76.2	50
6.7	20	96.3	60
19.3	30	100.0	62.41

Ethyl alcohol(99.4%) (C_2H_6O) + Margoric acid
($C_{17}H_{34}O_2$)

Ralston and Hoerr, 1942

%	f. t.	%	f. t.
2.0	0	52.4	40
2.9	10	79.5	50
6.2	20	98.8	60
18.2	30	100	60.94

Ethyl alcohol(99.4%) (C_2H_6O) + Stearic acid
($C_{18}H_{36}O_2$)

Ralston and Hoerr, 1942

%	f. t.	%	f. t.
0.42	0	18.5	40
1.08	10	51.2	50
2.20	20	80.0	60
5.1	30	100.0	69.20

Ethyl alcohol (C_2H_6O) + Oleic acid ($C_{18}H_{34}O_2$)

Dennhardt, 1899

%	t	d
4.51	23.6	0.7953
11.18	22.0	.8028
18.47	21.8	.8048
36.16	22.2	.8256
53.12	21.0	.8445

%	18°	25°	30°	τ
4.51	0.0264	0.0298	0.0323	0.016
11.18	.0278	.0304	.0350	.012
18.47	.0330	.0379	.0416	.018
36.16	.0922	.1015	.1108	.013
53.12	.0108	.0120	.0127	.014

Laing, 1918

molarity	d	n
	60°	
1.536	0.8368	0.0157
0.955	.7961	.0401
.811	.7905	.0540
.564	.7794	.0552
.482	.7761	.0656
.319	.7695	.0560
.268	.7677	.0521
.238	.7656	.0504
.095	.7593	.0417
.044	.7568	.0242
.011	.7542	.0121
.008	.7540	.0121

Ethyl alcohol (C_2H_6O) + Malonic acid ($C_3H_4O_4$)

Timofeev, 1894

%	f. t.	%	f. t.
30.0	-18.5	40.1	+19
30.7	-15	41.3	+19.5
35.3	0	100	132

Ethyl alcohol (C ₂ H ₆ O) + Methylsuccinic acid d (C ₅ H ₈ O ₄)			
Berner and Leonardsen, 1939			
%	d	(α) _D	
20°			
2.169	0.7990	+16.88	
4.136	.8052	16.59	
10.405	.8262	16.40	
27.68	.891	15.73	
47.03	.968	15.27	
Ethyl alcohol (C ₂ H ₆ O) + Ethylsuccinic acid (C ₆ H ₁₀ O ₄)			
Berner and Leonardsen, 1939			
%	(α) _D	%	(α) _D
20°			
5.149	+20.78	37.823	19.87
10.771	20.32	51.213	19.39
15.914	20.25	60.569	19.13
21.396	20.15	73.059	18.82
31.517	19.95		
Ethyl alcohol (C ₂ H ₆ O) + α,α'-Dimethylsuccinic acid-1 (C ₆ H ₁₀ O ₄)			
Berner and Leonardsen, 1939			
%	d	(α) _D	
20°			
7.978	0.8143	-5.77	
17.965	.8482	6.79	
30.111	.8910	8.09	
41.875	.9343	9.33	
Ethyl alcohol (C ₂ H ₆ O) + α-Methyl-α'-ethylsuccinic acid d (C ₇ H ₁₂ O ₄)			
Berner and Leonardsen, 1939			
%	d	(α) _D	
20°			
I (f. t.=180°)			
7.645	0.8120	+7.97	
11.883	.8214	7.79	
23.758	.8573	7.19	
37.177	.9007	6.47	
II (f. t.=81°)			
5.263	0.8063	+13.55	
10.330	.8213	13.79	
18.177	.8448	14.72	

Ethyl alcohol (C ₂ H ₆ O) + α-Methylglutaric acid d (C ₆ H ₁₀ O ₄)					
Berner and Leonardsen, 1939					
%	d	(α) _D			
5.268	0.8078	+21.74			
24.350	.8703	21.38			
44.013	.9441	21.22			
53.697	.9837	21.25			
Ethyl alcohol (C ₂ H ₆ O) + α-Ethylglutaric acid d (C ₇ H ₁₂ O ₄)					
Berner and Leonardsen, 1939					
%	d	(α) _D			
20°					
2.841	0.799	+14.32			
5.864	.809	14.12			
11.057	.824	14.00			
21.469	.855	13.81			
43.855	.929	13.90			
60.384	.988	14.24			
75.459	1.047	14.84			
Ethyl alcohol (C ₂ H ₆ O) + Maleic acid (C ₄ H ₄ O ₄)					
Timofeev, 1894					
%	f. t.				
30.2	0				
34.4	22.5				
Ethyl alcohol (C ₂ H ₆ O) + Malic acid (C ₄ H ₆ O ₅)					
Nasini and Gennari, 1895					
%	d	(α)			
		red	D	pale blue	dark blue
20°					
21.400	0.89188	-5.73	-7.09	-9.71	-10.32

Ethyl alcohol (C_2H_6O) + Tartaric acid ($C_4H_6O_6$)

Beckmann, 1890

%	D b. t.	%	D b. t.
1.64	+0.122	9.16	0.781
3.47	.271	12.87	1.161
6.27	.521	17.66	1.683

Timofeev, 1894

%	f. t.
18.3	-3
21.6	+19.2
22.4	+23
24.1	+39

Tammann and Hirschberg, 1894

%	0°	relative vol. 10°	20°	30°
0	1	1.01071	1.02165	1.03303
12.78	1	.01000	.02034	.03097
25.07	1	.00970	.01941	.02989

Winther, 1902

%	20°	30°	40°	50°
19.73	0.8931	0.8844	0.8757	0.8667
16.18	.8736	.8648	.8562	.8472
11.63	.8480	.8395	.8308	.8218
6.45	.8199	.8122	.8022	.7937

t (α)	t (α)	t (α)	t (α)	t (α)
red	yellow	green	pale blue	dark blue

19.73%

18.0	4.14	18.0	4.14	18.0	3.06	18.0	-2.04	18.0	-4.76
28.4	5.32	30.2	6.25	29.9	5.50	29.4	+1.92	28.9	-0.86
41.4	7.07	43.0	8.13	42.9	8.01	42.0	5.33	42.6	+3.60

16.18%

16.5	3.39	16.0	3.03	16.1	1.80	16.4	-3.46	16.3	-6.42
28.7	5.00	29.5	5.28	28.3	4.49	27.6	+0.50	27.5	-2.14
42.1	6.65	43.5	7.75	43.2	7.53	42.7	+4.70	43.1	+3.04

11.63%

14.9	3.43	14.6	2.82	14.6	1.21	14.8	-3.63	14.7	-6.65
27.8	4.70	28.9	5.32	28.8	4.40	29.2	+0.41	28.6	-2.15
41.4	6.42	42.0	7.26	42.0	6.84	41.8	+3.94	42.0	+2.38

6.45%

14.0	3.01	14.0	2.26	14.0	1.32	14.0	-3.76	14.0	-6.01
25.6	4.38	29.0	4.97	28.2	5.15	27.3	+1.14	26.4	-1.71
41.6	6.00	43.2	6.98	43.1	7.37	42.1	+5.28	42.5	+3.87

Ethyl alcohol (C_2H_6O) + Citric acid hydrate ($C_6H_{10}O_8$)

Gerlach, 1889

%	d
	15°
0	0.7972
11.111	.8456
16.666	.8722
33.333	.9593
100	1.552

Ethyl alcohol (C_2H_6O) + Trichloroacetic acid (C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f. t.	E	mol%	f. t.	E
30	-69	-	60	-10	-39.5
35	-53.5	-	70	+13.5	-40.5
40	-45	-	80	34	-
45	-40	-	90	49	-
50	-38	-33	100	57	-
55	-25	-38.5			
(1+2)					

Ethyl alcohol (C_2H_6O) + Benzoic acid ($C_7H_6O_2$)

Vandenberghe, 1903

%	D b. t.
6.54	+0.652
11.50	1.232
14.53	1.642
19.35	2.267
3.19	0.37
9.83	1.035
6.54	0.761
12.28	0.777
12.28	0.770

Timofeev, 1894

%	f. t.
20.3	-18
21.2	-13
28.8	+3
34.4	+19.2
35.9	+23

Guillaume, 1946					
%	d	n	(α) magn. 10 ⁶ *		
5780 Å					
20°					
20.04	0.8572	1.3963	4.842		
* in radians, Gauss, centim.					
P.P. and M.S. Kosakewitsch, 1933					
mol%	d	σ	mol%	d	σ
20°					
0	0.784	22.72	2.87	0.811	23.16
0.44	.793	22.81	6.27	.833	23.82
1.15	.798	22.94	9.77	.855	24.66
Timofeev, 1905					
%	U				
20°					
0	0.5933				
2.5	.576				
12	.567				
12.25	.569				
14.25	.560				
initial % final Q dil. (by mole acid)					
0	1.25	-2.92			
1.25	3.7	-2.98			
3.7	6.0	-3.00			
6.0	8.1	-3.05			
8.1	10.2	-3.06			
10.2	12.2	-3.10			
0	2.46	-2.83			
2.46	4.8	-3.04			
4.8	7.0	-3.00			
7.0	9.2	-3.04			
9.2	11.2	-8.01			
11.2	13.2	-3.07			

Ethyl alcohol (C ₂ H ₆ O) + Phenylacetic acid (C ₈ H ₈ O ₂)			
Timofeev, 1894			
%	f. t.	%	f. t.
39.7	-17	64.4	+19.4
41.5	-13	65.1	+20
50.7	0	100	+76
Ethyl alcohol (C ₂ H ₆ O) + Phenylpropionic acid (C ₉ H ₁₀ O ₂)			
Timofeev, 1894			
%	f. t.	%	f. t.
46.0	-18.5	78.8	+20
48.0	-16.0	100	+47
77.2	+19.6		
Ethyl alcohol (C ₂ H ₆ O) + Cinnamic acid (C ₉ H ₈ O ₂)			
Timofeev, 1894			
%	f. t.	%	f. t.
6.74	-18	18.0	+19.5
8.0	-12.5	100	+133
11.3	0		
Ethyl alcohol (C ₂ H ₆ O) + Mandelic acid (C ₈ H ₈ O ₃)			
Timofeev, 1894			
%	f. t.		
46.7	0		
53.6	16.5		
100	118		

Ethyl alcohol (C ₂ H ₆ O) + Phthalic acid (C ₈ H ₆ O ₄)				Ethyl alcohol (C ₂ H ₆ O) + m-Digallic acid (C ₁₄ H ₁₀ O ₉)			
Timofeev, 1894				Rakshit, 1925			
%		f. t.		%		d	
8.2		-2		0		0.7989	
11.0		+19		1		0.8046	
11.65		+21.4		5		0.8267	
11.4		+22					
Ethyl alcohol (C ₂ H ₆ O) + Salicylic acid (C ₇ H ₆ O ₃)				Ethyl alcohol (C ₂ H ₆ O) + m-Oxybenzoic acid (C ₇ H ₆ O ₃)			
Beckmann, 1890				Sidgwick and Ewbank, 1921			
%		D b. t.		%		f. t.	
1.35		+0.122		100		201.3	
2.68		.229		81.7		169.0	
5.02		.434		61.3		132.0	
		14.74		39.6		65.0	
Vandenbergh, 1903				Ethyl alcohol (C ₂ H ₆ O) + p-Oxybenzoic acid (C ₇ H ₆ O ₃)			
%		D b. t.		%		D b. t.	
3.85		+0.305		12.28		1.170	
8.26		0.740		17.35		1.80	
Timofeev, 1894				Sidgwick and Ewbank, 1921			
%		f. t.		%		f. t.	
26.7		-3		100		213.0	
28.9		0		82.9		184.0	
33.3		+19.2		60.9		136.5	
35.1		+23		38.75		67.0	
Sidgwick and Ewbank, 1921				Ethyl alcohol (C ₂ H ₆ O) + o-Aminobenzoic acid (C ₇ H ₇ O ₂ N)			
%		f. t.		%		Q dil. (by mole acid)	
40.6		41.0		initial		final	
60.4		85.2		0		5.3	
81.2		125.2		5.3		9.1	
100.0		159.0		9.1		12.1	
				12.1		15.0	
Tammann and Hirschberg, 1894							
%		relative vol.					
		0°	10°	20°	30°		
0		1	1.01071	1.02165	1.03303		
5.90		1	.01039	.02120	.03227		
15.90		1	.01003	.02049	.03118		
33.30		1	.00970	.01991	.02991		

Ethyl alcohol (C_2H_6O) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Timofeev, 1894

%	f. t.
23.3	0
42.57	22
100	147

Ethyl alcohol (C_2H_6O) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Timofeev, 1894

%	f. t.
33.6	0
42.3	19
43.9	21.5
100	141

Propyl alcohol (C_3H_8O) • Acetic acid ($C_2H_4O_2$)

Pickering, 1893

mol%	f. t.	mol%	f. t.
100	16.626	56.939	-13.87
93.171	14.13	51.964	-19.47
92.247	11.81	51.964	-19.17
88.224	9.31	46.727	-24.67
84.099	6.89	41.589	-31.07
79.866	4.19	37.592	-38.87
76.521	1.24	37.592	-40.07
71.060	-2.31	30.593	-50.67
66.479	-6.21	24.844	-60.67
61.773	-9.34	24.844	-59.17
61.773	-10.27	18.911	-70.17

Timofeev, 1905

initial	%	final	Q mix (by mole alcohol)
100		94.5	-600
94.5		88.7	-426
72.1		69.2	-149
			(by mole acid)
0		8.3	-302
8.3		15.0	-246
15.0		20.4	-216

Propyl alcohol (C_3H_8O) + Propionic acid
($C_3H_6O_2$)

Verschaffelt, 1894

%	n_D	%	n_D
20°			
100	1.38659	55.04	1.38931
74.21	.38898	45.13	.38899
64.94	.38927	0	.38517

Propyl alcohol (C_3H_8O) + Lauric acid ($C_{12}H_{24}O_2$)

Timofeev, 1894

%	f. t.
21.5	0
52.6	21

Propyl alcohol (C_3H_8O) + Myristic acid
($C_{14}H_{28}O_2$)

Timofeev, 1894

%	f. t.
5.6	0
31.2	21
55.3	36.5

Propyl alcohol (C_3H_8O) + Erucic acid ($C_{22}H_{42}O_2$)

Timofeev, 1894

%	f. t.
10.2	-2
60.5	+18
63.0	21.4
100	34

Propyl alcohol (C_3H_8O) + Oxalic acid ($C_2H_2O_4$)

Chatterji and Bose, 1950

%	35°	α	45°
13.8	0.9330		0.9816
22.2	2.3990		2.5710
30.7	4.4640		4.7940
36.4	6.1140		6.5940
38.2	-		7.0550

Propyl alcohol (C_3H_8O) + Malonic acid ($C_3H_4O_4$)

Timofeev, 1894

%	f. t.	%	f. t.
19.5	-18.5	29.5	+19
20.2	-15	30.7	+19.5
24.3	0	100	132

Propyl alcohol (C_3H_8O) + Maleic acid ($C_4H_4O_4$)

Timofeev, 1894

%	f. t.
20.0	0
24.3	22.5

Propyl alcohol (C_3H_8O) + Malic acid ($C_4H_6O_5$)

Nasini and Gennari, 1895

%	d	(α)				
		red	D	green	pale blue	dark blue
21.145	0.90122	-3.30	-3.62	-3.92	-3.88	-3.07

Propyl alcohol (C_3H_8O) + Camphoric acid
($C_{10}H_{16}O_4$)

Timofeev, 1894

%	f. t.
29.7	0
37.9	22.5
100	187

Propyl alcohol (C_3H_8O) + Benzoic acid ($C_7H_6O_2$)

Timofeev, 1894

%	f. t.
14.5	-18
15.7	-13
23.1	+3
28.2	+19.2
29.8	23

Chatterji and Bose, 1950

%	25°	30°	α 35°	40°	45°
19.4	-	0.002198	-	-	0.002761
24.5	0.001859	0.002034	0.002189	0.002383	0.002554
30.1	-	0.001918	-	-	0.002424
36.8	-	0.001789	-	-	0.002236
39.5	-	0.001599	0.001710	0.001802	0.001918

Propyl alcohol (C_3H_8O) + Phenylacetic acid
($C_8H_8O_2$)

Timofeev, 1894

%	f. t.	%	f. t.
29.4	-17	56.8	+19.4
32.3	-13	57.2	+20
40.9	0	100	+76

Propyl alcohol (C_3H_8O) + Phenylpropionic acid
($C_9H_{10}O_2$)

Timofeev, 1894

%	f. t.	%	f. t.
35.0	-18.5	73.9	+20.0
39.0	-16.0	100	+47
73.4	+19.6		

 Propyl alcohol (C_3H_8O) + Cinnamic acid
Chatterji and Bose, 1950 ($C_9H_8O_2$)

%	25°	30°	%	35°	40°	45°
10.0	-	0.005624	-	-	-	0.007093
18.2	0.005922	0.006511	0.007158	0.007720	0.008280	
22.2	-	0.006486	-	-	0.008461	
24.9	-	0.006410	0.007158	0.007759	0.008461	

 Propyl alcohol (C_3H_8O) + Salicylic acid
($C_7H_6O_3$)

Timofeev, 1894

%	f. t.
20.7	-3
21.6	0
26.3	+19.2
28.3	+23

Timofeev, 1905

initial	%	final	Q diss. (by mole acid)
0		1.23	-2.82
1.23		4.2	-3.11
4.2		7.0	-3.23
7.0		9.6	-3.35
9.6		12.1	-3.46
12.1		14.4	-3.59
14.4		22.7	-3.65

 Propyl alcohol (C_3H_8O) + Mandelic acid ($C_8H_8O_3$)

Timofeev, 1894

%	f. t.
35.0	0
43.0	16.5
100	118

 Propyl alcohol (C_3H_8O) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Timofeev, 1894

%	f. t.
17.7	0
31.0	22
100	147

 Propyl alcohol (C_3H_8O) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Timofeev, 1894

%	f. t.
24.1	0
31.0	19
32.5	21.5
100	141

Chatterji and Bose, 1950

%	25°	30°	%	35°	40°	45°
37.9	0.001428	0.001622	0.001828	0.002031	0.002248	
41.4	-	.001581	-	-	.002223	
45.6	-	.001381	-	-	.002170	
48.6	-	.001497	0.001724	0.001946	.002154	
53.4	-	.001375	-	-	.002038	

Isopropyl alcohol (C_3H_8O) + Caprylic acid
($C_8H_{16}O_2$)

Hoerr and Ralston, 1944

%	f. t.
73.7	0
90.0	10
100.0	16.30

Isopropyl alcohol (C_3H_8O) + Pelargonic acid
($C_9H_{18}O_2$)

Hoerr and Ralston, 1944

%	f. t.
80.8	0
96.7	10
100.0	12.25

Isopropyl alcohol (C_3H_8O) + Capric acid
($C_{10}H_{20}O_2$)

Hoerr and Ralston, 1944

%	f. t.
40.1	0
58.3	10
78.3	20
98.3	30
100.0	31.24

Isopropyl alcohol (C_3H_8O) + Undecanoic acid
($C_{11}H_{22}O_2$)

Hoerr and Ralston, 1944

%	f. t.
45.1	0
64.6	10
84.4	20
100.0	28.13

Isopropyl alcohol (C_3H_8O) + Lauric acid
($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
17.7	0	71.7	30
30.6	10	92.7	40
50.0	20	100.0	43.92

Isopropyl alcohol (C_3H_8O) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
18.1	0	77.3	30
34.2	10	98.5	40
55.6	20	100.0	41.76

Isopropyl alcohol (C_3H_8O) + Myristic acid
($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
6.7	0	69.7	40
12.0	10	92.4	50
24.0	20	100.0	54.15
45.1	30		

Isopropyl alcohol (C_3H_8O) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
5.8	0	73.1	40
11.7	10	95.4	50
25.6	20	100.0	52.54
48.7	30		

Isopropyl alcohol (C_3H_8O) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
2.36	0	48.5	40
4.4	10	73.0	50
9.8	20	96.1	60
24.4	30	100.0	62.82

Isopropyl alcohol (C_3H_8O) + Margoric acid
($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.2	0	52.0	40
2.9	10	77.5	50
9.7	20	98.5	60
27.5	30	100.0	60.94

Isopropyl alcohol (C_3H_8O) + Stearic acid
($C_{18}H_{36}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.1	0	27.6	40
0.4	10	54.2	50
2.0	20	80.8	60
9.1	30	100.0	69.32

Isopropyl alcohol (C_3H_8O) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
1.1	-40	35.5	-10
3.1	-30	69.3	0
10.3	-20	92.0	+10
		100.0	+13.38

Isopropyl alcohol (C_3H_8O) + Linoleic acid
($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
5.7	-50	67.0	-20
10.5	-40	91.5	-10
31.1	-30	100.0	-5.3

Butyl alcohol ($C_4H_{10}O$) + Caprylic acid ($C_8H_{16}O_2$)

Hoerr and Ralston, 1944

%	f. t.
69.2	0
88.2	10
100	16.30

Butyl alcohol ($C_4H_{10}O$) + Pelargonic acid
($C_9H_{18}O_2$)

Hoerr and Ralston, 1944

%	f. t.
78.0	0
96.2	10
100	12.25

Butyl alcohol ($C_4H_{10}O$) + Capric acid ($C_{10}H_{20}O_2$)

Hoerr and Ralston, 1944

%	f. t.
37.1	0
50.7	10
73.7	20
98.0	30
100	31.24

Butyl alcohol ($C_4H_{10}O$) + Undecanoic acid
($C_{11}H_{22}O_2$)

Hoerr and Ralston, 1944

%	f. t.
39.0	0
56.7	10
80.6	20
100	28.13

Butyl alcohol ($C_4H_{10}O$) + Lauric acid ($C_{12}H_{24}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
17.6	0	68.5	30
27.1	10	91.5	40
45.4	20	100	43.92

Butyl alcohol ($C_4H_{10}O$) + Tridecanoic acid
($C_{13}H_{26}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
17.7	0	74.7	30
28.5	10	98.3	40
50.0	20	100	41.76

Butyl alcohol ($C_4H_{10}O$) + Myristic acid
($C_{14}H_{28}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
6.8	0	66.0	40
11.6	10	90.7	50
22.3	20	100	54.15
41.5	30		

Butyl alcohol ($C_4H_{10}O$) + Pentadecanoic acid
($C_{15}H_{30}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
6.6	0	68.8	40
11.1	10	94.4	50
22.1	20	100	52.54
42.5	30		

Butyl alcohol ($C_4H_{10}O$) + Palmitic acid
($C_{16}H_{32}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.9	0	45.7	40
4.0	10	70.9	50
9.5	20	95.1	60
23.1	30	100	62.82

Butyl alcohol ($C_4H_{10}O$) + Margaric acid
($C_{17}H_{34}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
1.6	0	46.0	40
3.5	10	73.3	50
8.7	20	98.0	60
21.5	30	100.0	60.94

Butyl alcohol ($C_4H_{10}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Hoerr and Ralston, 1944

%	f. t.	%	f. t.
0.2	10	52.6	50
1.6	20	78.7	60
8.3	30	100.0	69.32
26.6	40		

Butyl alcohol ($C_4H_{10}O$) + Oleic acid ($C_{18}H_{34}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
1.3	-40	36.1	-10
3.8	-30	50.0	0
13.2	-20	90.5	+10
		100.0	+13.38

Butyl alcohol ($C_4H_{10}O$) + Linoleic acid
($C_{18}H_{32}O_2$)

Hoerr and Harwood, 1952

%	f. t.	%	f. t.
7.4	-50	64.3	-20
15.9	-40	89.7	-10
35.9	-30	100.0	- 5.3

Butyl alcohol ($C_4H_{10}O$) + Benzoic acid ($C_7H_6O_2$)

P.P. And M.S. Kosakewitsch, 1933

mol%	d	σ
	20°	
0	0.809	24.92
1.81	.819	25.23
3.81	.827	25.48
7.75	.843	25.97
11.31	.861	26.52

Butyl alcohol ($C_4H_{10}O$) + Salicylic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f. t.
100	159.0
79.2	121.6
48.9	85.6
28.88	38.0
24.36	24.0

Chatterji and Bose, 1950

%	25°	30°	κ 35°	40°	45°
15.7	-	0.006255	-	-	0.007955
18.5	0.006334	0.007075	0.007715	0.008206	0.008786
21.7	-	0.007423	-	-	0.009080
25.0	-	0.007947	0.008565	0.009281	0.009853

Butyl alcohol ($C_4H_{10}O$) + m-Oxybenzoic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	201.3	40.8	115.0
84.7	180.3	20.7	36.5
59.2	151.2		

Butyl alcohol ($C_4H_{10}O$) + p-Oxybenzoic acid
($C_7H_6O_3$)

Sidgwick and Ewbank, 1921

%	f. t.	%	f. t.
100	213.0	39.45	116.1
85.5	193.8	25.08	62.0
62.4	167.0	19.50	32.5

Butyl alcohol ($C_4H_{10}O$) + o-Aminobenzoic acid
($C_7H_7O_2N$)

Chatterji and Bose, 1950

%	25°	30°	κ 35°	40°	45°
4.17	0.001724	-	-	-	0.002390
10.8	.002630	-	-	-	.003384
15.3	.002981	0.003294	0.003407	0.003608	.003923
18.0	.003298	-	-	-	.004270
20.7	-	-	0.003857	0.004090	.004344

Butyl alcohol ($C_4H_{10}O$) + o-Nitrobenzoic acid
($C_7H_5O_4N$)

Chatterji and Bose, 1950

%	25°	30°	κ 35°	40°	45°
10.6	0.005991	-	-	-	0.007665
17.2	.007755	0.008253	0.009156	0.009592	.009970
23.6	.009440	-	-	-	.012050
31.9	.010400	0.011330	0.012220	0.013220	.014380

Isobutyl alcohol ($C_4H_{10}O$) + Acetic acid ($C_2H_4O_2$)

Timofeev, 1905

% initial final		Q mix (by mole acid)
0	8.3	-582
8.3	15.7	-446
15.7	21.5	-358
21.5	26.3	-305
26.3	30.7	-265

Isobutyl alcohol ($C_4H_{10}O$) + Isobutyric acid
($C_4H_8O_2$)

Verschaffelt, 1894

%	n_D	%	n_D
20°			
100	1.39290	33.93	1.39674
54.23	.39633	22.78	.39660
44.58	.39660	0	.39576

Isobutyl alcohol ($C_4H_{10}O$) + Lauric acid
($C_{12}H_{24}O_2$)

Timofeev, 1894

%	f. t.
18.4	0
49.7	21

Isobutyl alcohol ($C_4H_{10}O$) + Malonic acid
($C_3H_4O_4$)

Timofeev, 1894

%	f. t.
17.5	0
21.2	19
100	132

Isobutyl alcohol ($C_4H_{10}O$) + Maleic acid
($C_4H_4O_4$)

Timofeev, 1894

%	f. t.
14.2	0
17.5	22.5

Isobutyl alcohol ($C_4H_{10}O$) + Salicylic acid
($C_7H_6O_3$)

Timofeev, 1905

% initial final		Q mix (by mole acid)
0	1.24	-3.90
1.24	7.0	-4.17
7.0	12.1	-4.29
12.1	14.5	-4.32

tert. Butyl alcohol ($C_4H_{10}O$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f. t.	mol%	f. t.
100	57	45	-8
90	46.5	40	-17
80	31	35	-27
65	4	20	-18
60	-13	10	8
55	-7	0	25
50	-3.5		
(1+1)			

Amyl alcohol ($C_5H_{12}O$) + Acetic acid ($C_2H_4O_2$)

Hartwig, 1888-1891

%	n_D			$\tau \cdot 10^3$
	0°	18°	30°	
5.92	0.00189	0.00249	0.00273	24.0
16.63	.00414	.00493	.00543	15.2
44.21	.00598	.00795	.00899	23.9
53.64	-	.00906	-	23.8

Amyl alcohol ($C_5H_{12}O$) + Butyric acid ($C_4H_8O_2$)

Hartwig, 1888-1891

%	n_D			$\tau \cdot 10^3$
	0°	18°	30°	
6.19	0.00165	0.00212	0.00248	15.0
28.56	.00346	.00418	.00452	16.8
37.53	.00305	.00366	.00385	15.6

Amyl alcohol ($C_5H_{12}O$) + Oleic acid ($C_{18}H_{34}O_2$)

Dennhardt,

%	d	n_D			τ
	25°	18°	25°	30°	25°
5.49	0.8136	0.00138	0.00164	0.00188	0.022
13.59	.8228	.00112	.00128	.00143	.018
26.88	-	.00186	.00206	.00218	.014

Isoamyl alcohol ($C_5H_{12}O$) + Benzoic acid ($C_7H_6O_2$)

P.P. and M.S. Kosakewitsch, 1933

mol%	d	σ
	20°	
0	0.809	24.38
2.27	.821	24.74
4.81	.829	24.98
8.84	.843	25.40
14.17	.861	25.94

Cetyl alcohol ($C_{16}H_{34}O$) + Chloracetic acid
($C_2H_3O_2Cl$)

Mameli and Mannessier, 1913

I		II	
%	f. t.	%	f. t.
100	61.40	100	55.70
80.81	57.10	83.60	53.10
75.89	55.80	69.50	49.60
59.87	51.50	59.79	45.60
46.36	44.10	51.27	39.40
39.76	39.00	46.73	34.40
35.87	33.90	43.51	31.10
17.90	25.40	42.39	30.65
15.64	26.30	21.49	24.30
15.40	26.50	18.98	24.70
15.04	26.70	15.75	26.10
14.50	26.90	15.26	26.60
13.88	27.30	13.19	27.95
2.74	42.00	6.33	35.78
0	47.70	5.84	37.50
		0	47.70

Cetyl alcohol ($C_{16}H_{34}O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1935

mol%	f. t.	mol%	f. t.
100	57	50	14.5
90	49	40	23
80	35.5	30	31
70	14.5	20	40
65	4	10	46.5
60	6.5	0	50
55	10.5		

Cetyl alcohol ($C_{16}H_{34}O$) + Apocholic acid
($C_{24}H_{48}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	49.5	48.5	80.0	176.0	68.0
10.0	143.0	46.0	85.0	176.5	111.0
20.5	158.0	"	90.0	177.0	160.0
30.1	167.0	"	91.0	177.2	165.0
39.7	169.5	"	96.0	174.0	160.0
49.9	171.5	"	98.0	172.5	160.0
60.0	174.0	"	100.0	172.0	167.5
70.0	174.5	47.0			
			(1+8)		

Cetyl alcohol ($C_{16}H_{34}O$) + Cholic acid ($C_{24}H_{46}O_5$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	48.8	46.5	59.8	183.5	-
10.0	157.0	45.0	69.9	186.5	-
20.0	167.0	-	80.0	189.5	-
30.1	173.0	-	90.2	192.0	52.0
40.1	176.5	-	100.0	195.0	113.0
50.0	180.5	-	(1+8)		

Cetyl alcohol ($C_{16}H_{34}O$) + Desoxycholic acid
($C_{24}H_{44}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	49.5	48.5	84.6	184.0	105.0
16.4	160.0	47.0	90.0	184.8	164.0
30.7	167.0	48.0	95.0	183.0	160.5
51.0	175.0	"	97.0	181.0	160.0
73.0	181.5	"	100.0	172.0	168.0
79.8	183.0	53.5	(1+8)		

Cetyl alcohol ($C_{16}H_{34}O$) + Hyodesoxycholic acid
($C_{24}H_{46}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	48.5	46.5	49.8	176.5	45.5
4.6	114.5	45.5	59.9	180.8	"
10.4	149.0	"	70.0	184.5	"
20.4	161.5	"	79.9	189.0	"
30.4	167.5	"	90.0	192.5	53.0
39.8	171.8	"	100.0	196.5	193.5

Pinacol ($C_6H_{14}O_2$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f. t.	E	mol%	f. t.	E
100	57	-	55	41.5	-
90	47	-	50	44	-
80	28.5	13	45	42	-
75	22	18	40	38.5	-
73	24	-	30	27	16
70	25.5	-	25	20	17
66.7	26	-	20	24.5	13
65	25	-	10	36	15
63	30	21	0	42.5	-
60	35.5	23	(1+2) (1+1)		

Erythritol ($C_4H_{10}O_4$) + Palmitic acid ($C_{16}H_{32}O_2$)

Pushin and Dezelic, 1932

mol %	f. t.	
	L_1	L_2
0	118	-
10	118	58
20	118	58
30	118	58
40	118	58
50	118	58
60	118	58
70	118	58
80	118	58
90	118	58
100	-	58

Erythritol ($C_4H_{10}O_4$) + Chloroacetic acid
($C_2H_3O_2Cl$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
0	118	-	60	78	32
10	114	-	70	66	36
20	110	-	80	44.5	44.5
30	105	-	90	55	43.5
40	98	-	100	62	-
50	89	-			

Erythritol ($C_4H_{10}O_4$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Dezelic, 1932

mol%	f. t.	mol%	f. t.
0	118	70	64
10	114	80	55
30	106	85	52
40	97	90	54
50	85	100	58
60	74		

Erythritol ($C_4H_{10}O_4$) + Benzoic acid ($C_7H_6O_2$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
0	118	-	60	112.6	112
10	116.5	-	65	112.9	"
20	115.5	-	70	114.2	"
30	114.2	111.5	80	116.5	110
40	113.5	112	90	118.5	-
50	113	112	100	121	-

Erythritol ($C_4H_{10}O_4$) + Cinnamic acid ($C_9H_8O_2$)

Pushin and Dezelic, 1932

mol%	f. t.	E	mol%	f. t.	E
0	118	-	60	125.5	116
10	120	118	70	126.5	110
20	122	"	80	128	106
30	123	"	90	130	105
40	123.5	"	100	132	-
50	124.5	117			

Mannitol ($C_6H_{14}O_6$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f. t.	E
100	57	-
90	44	39.5
80	75	-
70	110	-
0	160	-

Mannitol ($C_6H_{14}O_6$) + Salicylic acid ($C_7H_6O_3$)

Kofler and Brandstätter, 1942

%	f. t.
0	166
E	150

Mannitol ($C_6H_{14}O_6$) + Methyl p-oxybenzoate ($C_8H_8O_3$)

Kofler and Brandstätter, 1942

%	f. t.
0	166
E	124

Mannitol ($C_6H_{14}O_6$) + Cinnamic acid ($C_9H_8O_2$)

Kofler and Brandstätter, 1942

%	f. t.
0	166
E	132

Saccharose ($C_{12}H_{22}O_{11}$) + Formic acid (CH_2O_2)

Grossmann and Bloch, 1912

c		(α)				
red	yellow	green	pale blue	dark blue	viol	
20°						
5.713	30.98	39.95	47.49	55.41	67.58	
12.685	24.63	31.22	37.12	44.41	51.77	
18.877	19.49	24.47	28.22	36.13	41.03	

c = g saccharose in 100 cc

Methyl malate l ($C_6H_{10}O_5$) + Formic acid
(CH_2O_2)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.381	-10.82	-13.26	-15.94	-19.25	-21.04	-22.75
25.362	-13.80	-19.52	-20.90	-25.43	-28.78	-30.16
12.559	-17.84	-22.85	-27.31	-33.60	-37.03	-40.69
5.1855	-20.35	-26.81	-32.01	-39.53	-43.87	-47.05
2.447	-22.89	-29.02	-35.15	-42.50	-46.79	-51.29

Methyl malate l ($C_6H_{10}O_5$) + Acetic acid ($C_2H_4O_2$)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.210	-2.21	-2.49	-2.59	-2.47	-2.37	-2.11
25.105	-1.43	-1.55	-1.47	-1.16	-0.80	-
12.5525	-1.19	-1.04	-0.80	-0.40	-0.16	-
4.921	-1.02	-0.81	-0.41	-0.00	+0.81	+1.63
2.4605	0.00	+0.41	+1.63	+4.06	+6.10	-

Methyl malate ($C_6H_{10}O_5$) + Propionic acid
($C_3H_6O_2$)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
42.957	-1.62	-1.80	-1.62	-1.38	-1.12	-1.68
24.9785	-0.40	-0.20	+0.24	+0.92	+1.48	-
12.4893	+0.56	+0.96	+1.60	+2.64	+3.20	-
4.890	+1.02	+1.84	+3.07	+4.29	+5.11	+5.93
2.445	+1.64	+2.86	+4.91	+6.54	+7.36	-

Methyl malate ($C_6H_{10}O_5$) + Butyric acid ($C_4H_8O_2$)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.217	-1.47	-1.65	-1.61	-1.10	-0.80	-0.24
25.1085	+0.12	+0.40	+1.08	+1.67	+2.39	-
12.5543	+0.88	+1.27	+2.31	+3.58	+4.94	-
4.918	+2.44	+3.05	+4.07	+5.69	+6.51	+7.93
2.459	+2.85	+3.66	+5.29	+7.73	+9.35	-

Methyl malate ($C_6H_{10}O_5$) + Isobutyric acid
($C_4H_8O_2$)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.499	-1.27	-1.41	-1.31	-0.77	-0.46	+0.10
25.2495	+0.44	+0.91	+1.62	+2.93	+3.49	-
12.6248	+1.19	+1.74	+2.93	+4.59	+5.62	-
4.901	+3.27	+4.69	+6.33	+8.37	+10.00	+11.63
2.4505	+4.49	+6.12	+8.57	+11.83	+15.10	-

Methyl malate ($C_6H_{10}O_5$) + Heptanoic acid
($C_7H_{14}O_2$)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.254	-0.04	+0.52	-0.96	+1.79	+2.43	+2.98
25.127	+1.27	+1.75	+3.10	+3.98	+5.25	+6.37

Ethyl tartrate ($C_8H_{14}O_6$) + Formic acid (CH_2O_2)

Grossmann and Landau, 1910

c	(α)					
	red	yellow	green	pale blue	dark blue	viol.
	20°					
50.569	+9.71	+11.17	+12.50	+12.81	+12.79	+12.10
24.085	+13.04	+15.28	+17.60	+19.31	+19.64	+20.39
13.168	+13.82	+16.40	+19.14	+20.96	+21.42	+21.95
5.219	+14.56	+17.24	+22.03	+25.10	+26.06	+26.83
2.6735	+16.08	+19.26	+23.56	+26.18	+26.93	+27.68
100	+7.01	+7.58	+7.77	+6.54	+5.77	+3.98

c = g tartrate in 100 cc

Chloral hydrate ($C_2H_5O_2Cl_3$) + Acetic acid
($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.74	0.095	89.89	-3.080
98.83	.385	86.62	4.140
97.61	.755	83.89	5.050
95.33	1.450	79.74	6.555
92.16	2.390		

Chloral alcoholate ($C_4H_7O_2Cl_3$) + Acetic acid
($C_2H_4O_2$)

Beckmann, 1888

%	D f. t.	%	D f. t.
99.43	-0.160	86.71	-3.255
98.42	.410	83.53	4.105
96.41	.495	81.53	4.665
94.42	1.335	78.95	
90.25	2.350		

Lactamide d ($C_8H_7O_2N$) + Malic acid l ($C_4H_6O_5$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	102	38.6	106
79.7	105	21.1	"
67.6	"	10.7	102
64.4	"	0	54

Lactamide l ($C_8H_7O_2N$) + Malic acid ($C_4H_6O_5$) l

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	102	30.0	106
78.9	104	7.5	97
66.2	105	0	54
60.3	104		

Lactamide d ($C_8H_7O_2N$) + Tartaric acid d ($C_4H_6O_6$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	173.6	18.3	165
62.8	171	13.9	161
36.0	168	5.8	154
35.7	168	0.0	54

Lactamide l ($C_8H_7O_2N$) + Tartaric acid d ($C_4H_6O_6$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	173.6	32.5	160
74.1	169	27.1	157
53.3	162	24.5	162
48.1	159	10.0	145
46.4	157	0.0	54

Lactamide d ($C_3H_7O_2N$) + α -Brompropionic acid l
($C_3H_5O_2Br$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	mol%	f. t.
100	+0.7	50.0	+9.2
79.9	-2.3	26.0	+33.3
72.4	-6.1	0	+54

E: 65 mol%

Lactamide l ($C_3H_7O_2N$) + α -Brompropionic acid l
($C_3H_5O_2Br$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	mol%	f. t.
100	+0.7	36.2	+21.3
82.4	-1.0	30.1	30.0
59.8	+1.2	0	54
46.6	+11.1		

E: 65 mol%

Lactamide d ($C_3H_7O_2N$) + Chlorsuccinic acid d
($C_4H_5O_4Cl$)

Feinberg, 1939

mol%	f. t.
0	54
28.0	172
51.2	168
74.0	158
100.0	168

Lactamide l ($C_3H_7O_2N$) + Chlorsuccinic acid d
($C_4H_5O_4Cl$)

Feinberg, 1939

mol%	f. t.	mol%	f. t.
0	54	73.2	158
29.2	171	76.4	159
54.3	169	100	168
60.1	166		

Lactamide d ($C_3H_7O_2N$) + Dichlorsuccinic acid d
($C_4H_4O_4Cl_2$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	E	mol%	f. t.	E
0	54	-	57.4	127	47
19.7	71	46	72.7	144	47
37.5	101	45	100.0	168	-

E: 10 mol%

Lactamide l ($C_3H_7O_2N$) + Dichlorsuccinic acid d
($C_4H_4O_4Cl_2$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	54	-	60.1	117	55
20.6	75	47	69.9	136	63
24.8	86	47	80.2	149	65
40.2	103	48	100.0	168	-
41.7	105	47			

E: 10 mol% (1+2)

Lactamide d ($C_3H_7O_2N$) + Chlormalic acid I d
($C_4H_5O_5Cl$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	mol%	f. t.
100	174.5	9.0	140
60.2	163	6.9	125
40.3	160	0	54
22.3	156		

Lactamide l ($C_3H_7O_2N$) + Chlormalic acid I d
($C_4H_5O_5Cl$)

Timmermans, Van Lancker and Jaffé, 1939

mol%	f. t.	mol%	f. t.
100	174.5	22.9	152
52.0	156	2.6	117
46.8	154	0	54

Lactamide d ($C_3H_7O_2N$) + Chlormalic acid II 1
($C_4H_5O_5Cl$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	171	9.1	128
59.8	159	2.6	83
28.1	149	0	54
21.4	146		

Lactamide l ($C_3H_7O_2N$) + Chlormalic acid II 1
($C_4H_5O_5Cl$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	mol%	f. t.
100	171	6.3	109
51.5	158	1.9	84
32.0	159	0	54

Lactamide l ($C_3H_7O_2N$) + Alanine d ($C_3H_7O_2N$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E
100	297	-
46.5	236	48
40.0	228	48
18.1	213	47
0.0	54	-

E: 5 mol%

Lactamide l ($C_3H_7O_2N$) + Alanine l ($C_3H_7O_2N$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	297	-	28.2	215	48
60	243	54	14.7	206	47
38.4	230	50	0.0	54	-

E: 5 mol%

Lactamide d ($C_3H_7O_2N$) + Asparagine 1 ($C_4H_8O_3N_2$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	238	-	39.9	215	55
69.3	225	-	25.1	200	50
55.3	221	68	0	54	-

E: 4 mol%

Lactamide l ($C_3H_7O_2N$) + Asparagine 1
($C_4H_8O_3N_2$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	238	-	37.6	212	53
57.5	222	64	19.8	199	50
45.4	218	53	0	54	-

E: 4 mol%

Lactamide l ($C_3H_7O_2N$) + Mandelic acid d
($C_8H_8O_3$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	133	-	38.0	73	30
58.8	100	30	24.6	62	28
50.1	89	30	0.0	54	-

E: 10 mol%

Lactamide d ($C_3H_7O_2N$) + Mandelic acid d
($C_8H_8O_3$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	133	-	47.6	92	29
86.9	121	68	37.4	83	26
72.6	103	60	25.0	67	28
61.4	97	48	0.0	54	-

Lactamide l ($C_8H_7O_2N$) + Phenylaminoacetic acid l
($C_8H_9O_2N$)

Timmermans, Van Lancker and Jaffe', 1939

mol %	f. t.	E	mol %	f. t.	E
60.0	-	52	7.5	171	50
34.9	200	52	0.0	54	-
25.1	182	48	E : 5 mol %		

Lactamide d ($C_8H_7O_2N$) + Phenylaminoacetic acid l
($C_8H_9O_2N$)

Timmermans, Van Lancker and Jaffe', 1939

mol%	f. t.	E	mol%	f. t.	E
100	-	-	43.8	207	50
70.4	-	53	28.9	190	51
68.5	-	52	13.3	175	49
54.9	-	50	E : 5 mol %		

Borneol ($C_{10}H_{18}O$) + Acetic acid ($C_2H_4O_2$)

Beckmann, 1888

%	D f. t. (acid)	%	D f. t. (acid)
99.06	-0.240	87.57	-2.975
96.82	-0.795	82.22	-4.235
92.27	-1.860		

Borneol ($C_{10}H_{18}O$) + Trichloroacetic acid

Pushin and Rikovski, 1935

($C_2HO_2Cl_3$)

mol%	f. t.	mol%	f. t.
100	57	47	44
90	49	45	42
80	33.5	42	41
75	25	40	44
70	16	35	57
60	33	30	76
55	40	0	204
50	45	(1+1)	

Menthol ($C_{10}H_{20}O$) + Oleic acid ($C_{18}H_{34}O_2$)

Castiglioni, 1934

%	d	η	%	d	η
20°					
100	0.8980	3235.1	85	0.8998	3133.9
95	.8995	3201.2	80	.9001	3102.0
90	.8996	3168.0	75	.9004	3067.2

Menthol ($C_{10}H_{20}O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1935

mol%	f. t.	mol%	f. t.
100	57	20	18
90	49.5	10	33
80	38	0	42
70	19.5		

Hexoestrol ($C_{18}H_{22}O_2$) + (Methoxynaphthyl) α , α -
dimethyl- β -ethyl propionic acid ($C_{18}H_{22}O_3$)

Horeau and Jacques, 1949 (fig.) and Jacques, 1949

%	m. t.	f. t.	%	m. t.	f. t.
100	136	137	60	134	167
90	123	131	70	143	173
80	120	130	80	154	179
70	119	137	90	170	182
60	120	150	100	184	185
50	127	158			

Cholesterol ($C_{27}H_{46}O$) + Palmitic acid ($C_{16}H_{32}O_2$)

Efremov, Vinogradova and Tikhomirova, 1937

wt%	mol%	f. t.	E
100	100	59.2	-
95	92.79	57.4	-
90	85.70	55.2	-
85	79.15	53.0	-
82.5	75.88	51.2	-
80	72.60	49.6	32.5
75	66.18	45.9	46.2
70	60.75	50.6	46.2
65	55.30	57.4	46.0
60	49.87	63.8	46.2
55	45.43	70.3	46.1
50	40.99	77.5	46.0
40	30.86	90.4	46.0
30	20.77	103.8	44.8
25	16.70	110.2	43.9
20	12.62	117.0	41.6
15	9.17	123.7	35.5
10	5.71	130.0	-
5	2.80	137.0	-
0	0	143.2	-

Cholesterol ($C_{27}H_{46}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Efremov, 1929-30

%	f. t.	E	min.
100	67.7	-	-
95	65.8	-	-
90	65.0	-	-
85	63.4	-	-
80	61.9	47.2	-
75	59.2	55.3	240
70	56.0	-	570
65	63.3	55.3	480
60	70.0	"	420
55	75.8	"	360
50	81.3	55.1	300
45	87.7	55.0	240
40	93.0	"	180
35	98.9	"	150
30	104.5	52.3	105
25	110.7	51.2	75
20	116.4	49.8	-
15	122.5	43.5	-
10	128.4	40.6	-
5	135.1	-	-
0	143.2	-	-

E: 70.2% 55.3°

Phytosterol ($C_{29}H_{48}O$) + Palmitic acid ($C_{16}H_{32}O_2$)

Efremov, Vinogradova and Tikhomirova, 1937

wt%	mol%	f. t.	E
100	100	59.2	-
95.0	92.79	56.6	-
90.0	85.70	53.0	-
85.0	79.15	48.7	37.5
82.5	75.88	46.2	45.0
80.0	72.60	45.8	-
75.0	66.18	51.2	45.1
70.0	60.75	56.8	45.1
65.0	55.30	63.0	45.1
60.0	50.15	68.8	45.0
55.0	45.43	74.8	45.0
50.0	40.99	81.3	44.6
40.0	30.86	92.7	43.8
30.0	29.77	104.8	41.6
25.0	16.70	111.0	39.9
20.0	12.62	116.2	37.8
15.0	9.17	122.2	34.9
10.0	5.71	126.6	28.5
5.0	2.80	130.5	-
0.0	0.0	133.7	-

Phytosterol ($C_{29}H_{48}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Efremov, 1929-30

%	f. t.	E	min.
100	67.7	-	-
95	66.4	-	-
90	64.8	-	-
85	62.0	44.7	60
80	57.1	54.4	360
75	58.5	54.6	510
70	64.4	54.6	420
65	69.7	54.6	360
60	75.2	54.6	300
55	80.4	54.6	260
50	86.0	54.6	245
45	91.2	54.6	215
40	96.3	54.5	200
35	101.8	54.2	140
30	107.3	50.3	100
25	113.2	45.5	70
20	118.6	42.7	35
15	122.7	?	?
10	126.9	-	-
5	132.3	-	-
0	133.7	-	-

E: 78.4% 54.6°

Stigmasterol ($C_{29}H_{48}O$) + Cinnamic acid ($C_9H_8O_2$)

Kofler and Brandstätter, 1942

%	f. t.
0	167
-	116 E

Stigmasterol ($C_{29}H_{48}O$) + Salicylic acid
($C_7H_6O_3$)

Kofler and Brandstätter, 1942

%	f. t.
0	167
-	119 E

Benzoin ($C_{14}H_{12}O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1940-46

mol%	f. t.	E	mol%	f. t.	E
100	57	-	63	61	24
94	51.5	-	53	85	-
87	43.5	-	29.5	112	-
79.5	36	18	0	133	-
	24	24			

8-Oxyquinoline (C_9H_7ON) + Acetic acid ($C_2H_4O_2$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	75	25
20	70	90	8
40	61	100	16.5
50	56		
60	50		

mol%	d		mol%	d	
	60°	80°		60°	80°
0	-	1.1594	60	1.151	1.130
20	-	.150	80	.125	1.090
40	-	.140	100	.000	1.0105
50	1.180	.135			

mol%	η		
	60°	70°	80°
0	-	-	2000
20	-	2500	1800
40	-	3000	2000
50	4900	3200	2100
60	6300	3750	2250
65 (max)	6500	3800	2300
80	4200	3000	2000

mol%	$\kappa \cdot 10^6$		
	60°	70°	80°
30	-	0	0
40	-	40	40
50	90	120	130
60	170	200	220
70	210	280	330
80	300	340	400
90	200	230	280

8-Oxyquinoline (C_9H_7ON) + Chloracetic acid
($C_2H_3O_2Cl$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	50	98 (1+1)
2	73 E	60	93
10	82	70	82
20	90	80	63
30	94	87	49 E
40	97	100	63

8-Oxyquinoline (C_9H_7ON) + Benzoic acid ($C_7H_6O_2$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	66.7	95
20	63	80	109
35	56 E	100	121.7
50	78		

mol%	d		η		
	100°	120°	100°	110°	120°
0	1.149	1.125	1300	1050	900
20	.148	.130	1600	1300	1050
40	.140	.120	1800	1350	1100
50	.132	.115	1900	1400	1200
60	.130	.110	1900	1400	1200
70	.125	.105	1800	1300	1100
80	-	.100	-	-	1050

mol%	$\kappa \cdot 10^6$		
	100°	110°	120°
0	0	0	0
10	0.25	0.3	0.4
20	0.8	0.8	0.8
30	1.4	1.3	1.2
40	2.1	1.9	1.75
50	2.4	2.2	2.0
60	2.35	2.05	1.8
70	1.7	1.5	1.2
80	-	-	0.25

8-Oxyquinoline (C_9H_7ON) + Salicylic acid ($C_7H_6O_3$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	50	120
3	70 E	67	127.5
10	85	71	126 E
20	98	80	139
40	115	100	156

mol%	d		η		$\kappa \cdot 10^6$	
	130°	130°	140°	130°	140°	140°
0	1.12	900	700	0	0	
20	.15	1300	1000	50	60	
30	.17	1900	1600	120	140	
40	.19	3300	2500	170	200	
50	.21	5500	4000	200	250	
60	.22	7000	5300	210	280	
70	.23	8200	5600	210	280	

8-Oxyquinoline (C_9H_7ON) + Hydrocinnamic acid
($C_9H_9O_2$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	68	28.5 E
20	64	80	38
40	52	100	49
50	44		

8-Oxyquinoline (C_9H_7ON) + Cinnamic acid
($C_9H_8O_2$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	50	99
20	62	60	108
25	60 E	80	122
40	89	100	134

8-Oxyquinoline (C_9H_7ON) + p-Oxybenzoic acid
($C_7H_6O_3$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	50	160
6	67 E	60	172
10	85	70	182
20	120	80	194
30	138	90	200
40	150	100	219

8-Oxyquinoline (C_9H_7ON) + p-Nitrobenzoic acid
($C_7H_5O_4N$)

Dionisiev and Dzhelomanova, 1954 (fig.)

mol%	f. t.	mol%	f. t.
0	75	50	182
1	72 E	60	200
10	124	70	218
20	145	80	224
30	160	90	235
42	168.5	100	238

Phenol (C_6H_6O) + Formic acid (CH_2O_2)

Paterno, 1896

%	D f. t.	%	D f. t.
0.50	-0.73	8.14	-10.61
1.16	1.66	10.90	13.80
2.04	2.91	13.93	17.31
6.14	8.32		

Phenol (C_6H_6O) + Acetic acid ($C_2H_4O_2$)

Paterno, 1896

%	D f. t.	%	D f. t.
0.87	-0.89	11.57	-12.08
1.96	2.07	14.16	15.02
3.12	3.39	18.23	19.22
4.24	4.51	25.02	27.92
5.50	5.61	26.19	29.18
7.58	7.57	30.33	33.93
9.83	10.49	34.11	38.92

Abegg, 1902

N (C_6H_6O)	f. t.
0	16.52
1.211	12.015
2.143	8.085
2.893	4.62

Bedson and Williams, 1881

%	d	n	H _α	H _β	H _γ
			H _α	H _β	H _γ
		20°			
100	1.0594	1.41585	1.42572	1.43159	
74.62	.0617	.43498	.44618	.45291	
63.53	.0559	-	-	-	

Phenol (C_6H_6O) + Valeric acid ($C_5H_{10}O_2$)

Paterno, 1896

%	D f. t.	%	D f. t.
0.41	-0.30	8.25	-5.44
0.93	0.67	11.33	7.43
2.31	1.59	13.86	9.12
3.87	2.62	15.31	10.41
5.97	3.98		

Phenol (C_6H_6O) + Oxalic acid ($C_2H_2O_4$)

Schmidlin and Lang, 1912

(1+1)

Phenol (C_6H_6O) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.
0	41	-	54.5	155
2	48	-	60.9	160
6.7	100	36	72.8	167
9.8	109	-	82.9	172.5
14.9	119	-	92.8	179
23.7	130	36	97.1	181
30.5	138	-	100	183
46.3	151	36		

Phenol (C_6H_6O) + Chloracetic acid ($C_2H_3O_2Cl$)
Kendall, 1916

mol%	f. t.	mol%	f. t.
100	61.4	37.9	23.6
88.5	56.0	30.0	17.4
78.1	50.4	13.5	27.1
67.9	44.9	8.8	35.1
58.3	39.1	0	42.4
46.7	30.9		

Mameli and Mannessier-Mameli, 1933

E(acid I): 32.89 mol% 14.1°

(acid II): 35.10 mol% 11.8°

Mameli and Cocconi, 1923

%	f. t.		%	f. t.	
	I	II		I	II
100	61.8	56.6	35.00	-	11.8
97.54	-	55.7	34.70	18.0	-
82.76	51.5	-	34.46	17.1	-
81.28	-	46.3	33.42	15.2	-
74.16	46.7	-	33.36	-	13.6
67.68	-	38.6	32.93	14.7	-
64.03	40.6	36.2	32.80	14.1	-
54.60	34.4	-	32.70	-	13.7
52.95	-	29.4	32.20	-	14.4
47.92	30.3	-	31.30	15.1	-
45.84	28.5	-	30.28	-	16.0
45.68	-	22.8	27.90	18.2	-
44.98	-	22.6	25.93	-	20.6
43.35	-	21.1	19.43	-	25.4
40.12	23.2	-	13.90	-	30.4
39.52	22.2	-	10.70	33.2	-
37.54	-	15.7	0.00	42.0	-
36.01	-	12.8			

Učovenko, Ayrapetova and Malakhova, 1952 (fig.)

mol%	f. t.	mol%	f. t.
0	42	50	10
25	24	75	35
43	3 E	100	60

mol%	d		
	50°	60°	75°
0	1.0499	1.0399	1.0280
9.70	.0745	.0638	.0525
17.84	.0943	.0856	.0736
24.33	.1133	.1053	.0918
29.63	.1300	.1204	.1116
32.65	.1380	.1307	.1148
39.40	.1562	.1491	.1324
48.87	.1916	.1852	.1661
59.50	.2212	.2119	.1954
69.41	.2596	.2500	.2320
73.00	.2926	.2718	.2548
80.82	.3120	.2982	.2803
88.72	.3327	.3230	.3052
100	-	.3720	.3520

mol%	η		
	50°	60°	75°
0	3336	2521	1742
9.70	3353	2527	1763
17.84	3338	2524	1768
24.33	3308	2508	1771
29.63	3277	2505	1768
32.65	3242	2497	1765
39.40	3203	2493	1761
48.87	3142	2441	1762
59.50	3121	2435	1782
69.41	3112	2431	1790
73.00	3103	2427	1803
80.82	3113	2428	1809
88.72	3125	2436	1819
100	-	2442	1835

Phenol (C_6H_6O) + Trichloroacetic acid (C_2HCl_3)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	57.3	53.7	37.4
90.2	50.7	50.2	37.6 (1+1)
82.6	45.2	44.8	37.2
75.7	38.9	41.1	36.3
68.8	31.9	35.4	34.2
65.1	34.9	18.3	25.9
60.0	36.0	13.2	31.8
57.0	36.8	7.2	37.0
		0	42.4

Pushin and Rikovski, 1935

mol%	f. t.	E	mol%	f. t.	E
100	57	-	45	37.5	-
90	50.5	-	35	34.5	17.5
80	42.5	27.5	25	27.5	21.5
70	33	31.0	20	23	21.0
65	34	31.0	10	33	-
55	37.5	-	0	41	-
50	38.5	-			

(1+1)

Udovenko, Ayrapetova and Malakhova, 1952 (fig.)

mol%	f. t.	mol%	f. t.
0	42	50	36
22.1	20 E	62.1	22 E
33	30	100	58
39.4	26 E		

mol%	d		
	50°	60°	75°
0	1.0518	1.0427	1.0290
8.83	.0954	.0902	.0754
14.56	.1382	.1324	.1184
23.00	.1990	.1901	.1721
30.72	.7754 sic	.2030	.2004
40.75	.2942	.2869	.2704
49.75	.3445	.3323	.3150
59.68	.4015	.3917	.3638
66.95	.4445	.4337	.4160
75.50	.4863	.4770	.4586
81.66	.5195	.5074	.4863
89.95	.5667	.5462	.5330
100	.6181	.6048	.5776

mol%	η		
	50°	60°	75°
0	3278	2494	1737
8.83	3569	2721	1865
14.56	3811	2900	1977
23.00	4127	3127	2141
30.72	4342	3248	2238
40.75	4683	3482	2386
49.75	4779	3666	2513
59.68	5012	3778	2617
66.95	5085	3886	2706
75.50	5126	3894	2754
81.66	5115	3878	2792
89.95	5083	3837	2815
100	4797	3786	2779

Phenol (C_6H_6O) + Benzoic acid ($C_7H_6O_2$)

Mortimer, 1923

mol%	f. t.
16.9	40
28.2	60
44.2	80
67.0	100
100	121.0

Moerman, 1933

mol%	f. t.	mol%	f. t.
0.0	40.2	42.5	77.0
5.1	37.4	48.3	83.2
10.8	34.1	60.0	92.9
12.7	32.1	68.6	100.4
13.3	34.2	74.1	103.9
16.3	40.8	88.6	114.1
21.3	49.3	100.0	121.4
29.5	62.6		

Phenol (C_6H_6O) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
0.0	40.5	-	50.9	82	-
8.0	33.8	29	60.1	94	29
17.6	32	"	70.8	106	-
31.3	53	"	82.5	119	-
40.7	67	-	100	133	-
48.6	79	-			

Phenol (C_6H_6O) + Salicylic acid ($C_7H_6O_3$)

Bailey, 1925

%	f. t.	E	min.
0	43.80	-	-
1.64	39.95	-	-
3.17	39.12	38.10	18
4.39	38.47	38.16	25
5.00	38.16	38.16	28.5
7.38	45.9	38.18	28
10.09	55.6	38.07	27.5
14.2	65.6	37.9	26
27.5	89.2	38.0	23
46.0	113.5	-	-
60.0	128.7	38.0	-
81.8	147.2	-	-
94.9	157.0	-	-
100.0	160.4	-	-

Resorcinol ($C_6H_6O_2$) + Acetic acid ($C_2H_4O_2$)

Mortimer, 1923

mol%	f. t.	mol%	f. t.
82.4	20	43.7	80
72.8	40	19.0	100
60.6	60	0.0	110.2

Resorcinol ($C_6H_6O_2$) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
0	115	-	46.9	146	-
5.5	109.5	100	65.3	159.8	100
11.2	102	-	80.7	170.5	-
22.3	116	100	90.3	176.5	-
43.4	143	100	96.1	179.9	-
59.7	138	-	100	183	-

E: 12.5%

Sorum and Durand, 1952

%	f. t.
0	115.0
E	96.0
100	183.0

Resorcinol ($C_6H_6O_2$) + Trichloroacetic acid
(C_2HCl_3)

Kitran, 1924

E: 70 mol% 25°

Resorcinol ($C_6H_6O_2$) + Benzoic acid ($C_7H_6O_2$)

Pushin and Wilowitsch, 1925 (fig.)

mol%	f. t.	mol%	f. t.
100	121	40	86 E
90	117	30	92
80	111	20	98
70	107	10	105
60	100	0	111
50	93		

Hrynakowski and Adamanis, 1934

mol%	f. t.	E	min.
100	121.4	-	-
94.5	119.0	-	-
90.0	116.0	-	-
83.6	113.0	-	-
78.3	111.2	86.0	0.3
73.0	108.2	"	0.5
67.8	104.5	"	0.8
62.6	101.5	"	0.8
57.5	98.0	"	1.3
52.4	94.5	"	1.7
47.4	92.2	"	1.7
42.4	87.2	"	2.5
41.5	86.0	"	2.5
37.5	88.5	"	2.3
32.7	90.3	"	1.7
27.9	94.2	"	1.0
23.1	96.5	"	0.5
18.4	99.2	"	0.5
13.7	101.5	"	0.7
9.7	104.0	-	-
4.5	106.0	-	-
0	110	-	-

Resorcinol ($C_6H_6O_2$) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
0	115	-	44.7	90	87
5.8	113	-	54.5	99	"
12.2	109.2	-	65.7	108.5	"
19.6	104.3	-	75.7	116	"
26.8	99	-	83.5	122	-
34.8	92	87	92	127	-
41.3	87.2	87	100	133	-

E: 41%

Sorum and Durand, 1952

%	f. t.
0	115.0
E	85.0
100	133.0

Pyrocatechol ($C_6H_6O_2$) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.
0.0	104	-	53.1	151.5
7.8	99	-	53.6	152
15.0	104	94	59.4	156.5
34.0	120	-	64.6	161
31.9	129.5	94	72.9	167
41.0	140	-	83.4	173.5
47.7	146.5	-	92.9	178
49.1	147	-	100.0	183

E: 13.5%

Pyrocatechol ($C_6H_6O_2$) + Trichloroacetic acid
(C_2HCl_3)

Kitran, 1924

E: 75 mol% 34.7°

Pyrocatechol ($C_6H_6O_2$) + Benzoic acid ($C_7H_6O_2$)

Lecat, 1949

%	b.t.
0	245.9
2	245.85 Az
100	250.8

Pyrocatechol ($C_6H_6O_2$) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.	E
0.0	103.5	-	54.4	91	81
8.6	100	-	59.3	96	-
18.8	95.5	-	68.6	106.5	81
26.8	91.5	81	75.2	113	-
36.2	86.5	-	82.3	119	81
41.9	83.0	81	92.7	127.5	-
48.0	84	-	100.0	133	-
48.6	84	-			

E: 46%

Hydroquinone ($C_6H_6O_2$) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.
0	169.5	-	67.5	160.5
4.8	165.5	-	75.8	167.5
11.3	161.5	128	76.8	169
20.4	157	-	79.6	171
28.6	150	-	83.6	173.5
36.6	139	128	89.2	177
44.3	133.5	-	89.5	176
49.6	140.5	-	95.8	181
56.7	149.5	-	100	183
66.1	159	-		

E: 41%

Hydroquinone ($C_6H_6O_2$) + Chloroacetic acid
($C_2H_3O_2Cl$)

Pushin, 1935

%	f.t.	E	min.
100	62	-	-
95	60.5	-	-
90	59	59	4.0
80	85	57	3.2
70	101	53	3.0
50	122	53	-
40	135	41	-
30	143	43	1.2
20	152	31	-
0	171	-	-

Hydroquinone ($C_6H_6O_2$) + Trichloroacetic acid
(C_2HCl_3)

Pushin and Rikovski, 1935

mol%	f.t.	E	min.
100	57	-	-
95	69	-	2.4
90	79	-	1.9
85	85	-	1.4
80	88	-	1.2
75	90	90	0.8
72	95	38.5	0.6
70	100	37.5	0.9
66.7	105	83	1.3
60	119	79	1.2
50	130	64	1.0
40	140	64	0.9
30	149	57	0.7
20	157	-	-
10	164	-	-
0	170	-	-

(1+2)

Hydroquinone ($C_6H_6O_2$) + Cinnamic acid ($C_9H_8O_2$)

Krenann, Zechner and Drazil, 1924

%	f. t.	E
0	170	-
5.2	168	-
14.7	164.3	-
24.3	160.5	-
33.5	157	117
41.8	154	117
52.6	145	117
61.5	137	117
69.7	130	-
78.2	120	117
85.9	119	-
93.8	128	-
100.0	133	-

E : 81 %

Hydroquinone ($C_6H_6O_2$) + Methoxycinnamic acid
($C_{10}H_{10}O_3$)

de Kock, 1904

mol%	f. t.	clear. point
100	170.6	135.5
96.81	169.7	177.6-179.9
94.3	168.6	170.5-174.7
92	167.9	170.6
90	167.3	-
80.1	161.7	-
70	156.2	-
60	149.7	-
40.2	145.4	-
20.2	157.3	-
0	169.0	-

E: 140.8°

Hydroquinone ($C_6H_6O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kitran, 1924

%	f. t.	
65	77.5	E
75	84.9	(1+3)
98	4.95	E

Pyrogallol ($C_6H_6O_3$) + Succinic acid ($C_4H_6O_4$)

Krenann, Zechner and Drazil, 1924

%	f. t.	E
0.0	130	-
6.9	125	-
17.2	117	-
28.7	121	-
42.0	136	-
50.7	146	110
53.2	148	-
57.6	152	-
58.0	152	110
61.5	156	-
63.0	157	-
67.5	161.5	-
75.7	167	-
82.5	172	-
94.0	179.5	-
100.0	183	-

E : 21 %

Pyrogallol ($C_6H_6O_3$) + Cinnamic acid ($C_9H_8O_2$)

Krenann, Zechner and Drazil, 1924

%	f. t.	E
0.0	130.5	-
12.6	126	-
27.2	118	-
34.5	115	101
39.5	111	101
42.1	110	-
48.6	106	101
52.6	104	101
53.6	103	101
57.7	103	101
60.0	104	101
66.7	107.5	101
81.8	118	-
92.3	126	-
100.0	133	-

E : 56 %

Pyrogallol ($C_6H_6O_3$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kitran, 1924

E : 88 mol % 40.2°

Thymol ($C_{10}H_{14}O$) + Acetic acid ($C_2H_4O_2$)

Paterno and Ampola, 1897

%	f.t.	%	f.t.
0.0	49.32	47.54	-5.75
0.59	48.50	50.17	-4.27
0.65	47.17	52.12	-3.01
2.89	45.82	53.82	-2.04
4.61	44.07	55.57	-1.05
6.43	42.02	58.07	+0.54
8.88	40.04	60.67	1.68
10.40	38.71	64.56	3.59
13.08	36.61	66.34	4.91
16.08	34.07	70.43	6.03
19.64	30.73	73.52	7.19
21.52	29.09	77.35	8.53
25.05	26.26	81.66	9.47
28.16	22.38	85.69	10.57
32.02	18.55	89.14	11.56
33.16	17.43	92.37	12.46
37.43	11.97	93.35	13.26
39.34	10.68	97.43	13.86
42.15	+7.48	99.40	14.26
43.73	-8.76	100.00	15.05
45.53	-6.99		

Thymol ($C_{10}H_{14}O$) + Caprylic acid ($C_8H_{16}O_2$)

Lecat, 1949

%	b.t.
0	232.9
-	232.8 Az
100	238.5

Thymol ($C_{10}H_{14}O$) + Stearic acid ($C_{18}H_{36}O_2$)

Eykmán, 1889

%	D f.t.
96.537	-1.00
92.69	2.12
88.57	3.32
82.58	5.10

Thymol ($C_{10}H_{14}O$) + Chloracetic acid
($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

%	f.t.		%	f.t.	
	I	II		I	II
100	61.8	56.6	35.31	-	30.5
93.01	59.4	-	35.09	35.4	-
92.63	-	54.1	32.73	-	27.6
82.39	-	51.0	32.20	-	27.1
75.15	-	48.8	31.88	-	27.5
68.22	51.5	46.6	28.84	30.2	-
65.84	50.3	-	26.27	32.1	-
56.89	-	42.5	25.08	32.6	-
51.39	44.9	-	21.18	36.2	-
49.55	-	39.8	14.44	41.0	-
44.67	-	37.2	0.00	50.0	-
40.47	39.3	34.4			

Thymol ($C_{10}H_{14}O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	57.3	43.0	18.0
92.2	52.8	35.4	25.8
84.6	46.8	28.6	32.0
76.4	39.6	21.7	37.5
69.1	32.1	13.6	42.4
62.0	23.5	7.0	46.1
55.2	15.0	0	49.6
49.4	10.1		

Carvacrol ($C_{10}H_{14}O$) + Caprylic acid ($C_8H_{16}O_2$)

Lecat, 1949

%	b.t.
0	237.85
25	237.6 Az
100	238.5

Carvacrol ($C_{10}H_{14}O$) + Benzoic acid ($C_7H_6O_2$)

Lecat, 1949

%	b.t.
0	237.85
-	237.75 Az
100	250.8

p-Oxyphenyloctadecane ($C_{24}H_{42}O$) + Apocholeic acid
($C_{24}H_{42}O_4$)

Rheinboldt, 1939

%	f.t.	m.t.	%	f.t.	m.t.
0.0	84.0	82.5	80.0	168.5	105.0
5.3	82.0	77.0	85.0	170.0	140.0
10.4	85.0	"	87.9	170.5	153.0
30.0	135.0	"	90.3	171.0	164.0
49.7	155.0	"	95.2	170.5	164.0
60.2	160.0	77.5	100.0	172.0	169.5
72.5	165.8	"			

Orcinol ($C_7H_8O_2$) + Chloracetic acid ($C_2H_3O_2Cl$)

Pushin, 1935

%	f.t.	E	min.
100	62	-	-
87.3	57	-	-
75.3	50	-	-
64.0	40	35	0.3
53.2	47	35	1.3
43.2	64	32.5	0.7
33.7	73	30	0.2
24.6	82	27	0.1
16.0	90	-	-
7.8	98	-	-
0	106	-	-

Orcinol ($C_7H_8O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Pushin, Lukavetzki and Rikovski, 1948

mol%	f.t.	E	mol%	f.t.	E
0	108	-	60	48	21
10	103	-	70	25	22
20	97	-	80	41	21
30	89	-	90	51	20
40	78	-	100	58	-
50	65	-			

Orcinol ($C_7H_8O_2$) + Tribromoacetic acid
($C_2HO_2Br_3$)

Pushin, Lukavetzki and Rikovski, 1948

mol%	f.t.	E	mol%	f.t.	E
0	108	-	60	99	-
10	101	71	70	108	-
20	92	73	80	118	108
30	83	75	90	127	121
40	-	76	100	135	-
50	88	75			

o-Cresol (C_7H_8O) + Chloroacetic acid ($C_2H_3O_2Cl$)

Lecat, 1949

%	b.t.	Sat.t.
0	191.1	-
54	187.7	37 Az
100	189.35	-

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	61.4	30.6	17.4
86.3	54.9	27.6	16.7
75.2	49.2	17.9	21.8
63.0	42.4	8.6	26.6
51.1	34.8	0	30.4
39.4	25.7		

Maneli and Cocconi, 1923

% I	f.t.		% II	f.t.	
	I	II		I	II
100	61.8	56.6	48.40	33.3	27.3
95.09	-	53.8	36.70	23.4	16.9
91.01	56.7	-	33.40	-	13.0
85.90	-	49.3	28.10	15.8	-
83.70	53.3	-	25.00	-	16.9
72.88	48.0	-	23.00	18.8	-
72.26	-	42.6	12.50	24.4	24.4
68.24	45.6	-	8.44	26.7	26.7
61.11	41.6	36.1	0.00	31.0	-

o-Cresol (C_7H_8O) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	57.3	45.5	26.7
90.3	50.3	40.1	25.3
82.7	44.4	35.0	23.4
76.0	38.3	30.2	20.8
64.6	25.6	-	9.5
56.0	15.3	23.0	15.6
60.5	25.3	14.9	21.3
56.0	26.6	6.4	26.5
50.8	27.0 (1+1)	0	30.4

m-Cresol (C_7H_8O) + Formic acid (CH_2O_2)

Tsakalotos, 1908

%	d	η
20°		
0	1.034	15130
37.3	1.085	4280
54.9	1.117	3129
70.8	1.147	2432
85.5	1.178	1999
100.0	1.216	1780

m-Cresol (C_7H_8O) + Caproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b.t.
0	202.2
13	201.9 Az
100	205.15

m-Cresol (C_7H_8O) + 2-Ethylcaproic acid
($C_8H_{16}O_2$)

Othmer, Savitt and al., 1949 (fig.)

mol% (at b.t.)	
L	V
80	66
60	41
40	24
20	12

m-Cresol (C_7H_8O) + Chloracetic acid ($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

%	f.t.	
	I	II
100	61.8	56.6
79.62	52.1	46.9
68.02	-	40.9
63.30	43.9	-
51.77	-	31.3
51.03	35.5	-
39.36	26.4	21.7
32.66	-	14.6
31.03	17.9	-
24.44	10.2	-
24.13	-	5.2
22.86	8.4	3.2
18.48	0.2	5.0
16.70	-3.0	-
15.98	-1.8	-
13.24	+0.4	-
9.48	+3.2	-
6.83	5.1	-
0	10.5	-

m-Cresol (C_7H_8O) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	57.3	46.6	14.1
92.9	52.5	40.4	12.9
85.9	47.4	35.6	11.1
77.2	39.5	30.1	7.8
71.0	33.9	25.3	3.9
62.7	24.3	15.5	-0.4
56.4	16.1	8.8	+4.5
51.1	14.4	0	+0.9
(1+1)			

p-Cresol (C_7H_8O) + Caproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	201.7
11	201.5 Az
100	205.15

p-Cresol (C_7H_8O) + Isocaproic acid ($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	201.7
80	199.1 Az
100	199.5

p-Cresol (C_7H_8O) + Stearic acid ($C_{18}H_{36}O_2$)

Eykmán, 1889

%	D f. t.	%	D f. t.
3.4	-1.30	14.65	-4.94
7.32	2.70	19.46	6.32
10.4	3.73		

p-Cresol (C_7H_8O) + 2-Ethylhexanoic acid
($C_8H_{16}O_2$)

Othmer, Savitt and al., 1949 (fig.)

mol% at b. t.			
L		V	
80		65	
60		41	
40		24	
20		11	

p-Cresol (C_7H_8O) + Chloracetic acid ($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

% f. t.		% f. t.	
I	II	I	II
100	61.8	56.6	49.23
95.09	-	53.8	39.33
92.36	-	52.9	36.96
85.90	-	49.3	30.39
83.70	53.3	48.3	27.88
75.93	49.6	-	25.32
72.88	48.0	-	22.80
72.26	-	42.6	20.03
68.24	45.5	-	11.52
64.85	-	38.2	0.00
61.10	41.0	36.1	-

p-Cresol (C_7H_8O) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	57.4	44.8	37.0
91.6	51.6	37.0	34.5
85.1	46.9	29.9	30.2
76.9	39.9	22.2	23.5
70.0	32.3	17.6	19.9
63.5	34.7	12.7	24.7
58.3	36.4	6.6	29.8
53.1	37.4	0	34.5
49.2	37.6 (1+1)		

p-Cresol (C_7H_8O) + Benzoic acid ($C_7H_6O_2$)

Da Silva, 1934

mol%	f. t.	mol%	f. t.
0	34.2	24.1	45.8
4.62	31.7	37.8	73.3
7.75	30.0	45.5	80.9
10.7	28.4	58.9	92.2
13.5	34.7	79.5	108.8
13.8	35.3	100	121.2
14.6	38.7		

Eugenol ($C_{10}H_{12}O_2$) + Pelargonic acid ($C_9H_{18}O_2$)

Lecat, 1949

%	b. t.
0	254.8
52	250.5 Az
100	254.0

Isoeugenol ($C_{10}H_{12}O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Lecat, 1949

%	b. t.
0	268.8
58	266.2 Az
100	266.5

Lecat, 1949

Guaiacol ($C_7H_8O_2$) (b. t. = 205.05) + Acids

Name	Formula	b. t.	Az	b. t.
Caproic acid	$C_6H_{12}O_2$	205.15	42	200.8
Isocaproic acid	$C_6H_{12}O_2$	199.5	80	198.5
Bromacetic acid	$C_2H_3O_2Br$	205.1	40	203.7
Brompropionic acid	$C_3H_5O_2Br$	205.8	45	204.2

Guaiacol ($C_7H_8O_2$) + Chloracetic acid ($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

%	f. t.		%	f. t.	
	I	II		I	II
100	61.8	56.6	31.94	21.0	-
88.33	-	51.4	30.41	20.1	16.1
80.40	-	47.9	24.80	-	10.2
72.62	48.7	-	24.02	15.2	10.6
71.38	-	43.6	23.09	13.9	-
58.80	41.0	-	21.80	13.5	-
56.48	-	35.0	17.77	16.5	-
49.01	34.4	29.0	13.34	19.6	-
39.65	27.7	-	10.81	21.6	-
37.74	-	21.9	0.00	32.0	-

Guaiacol ($C_7H_8O_2$) + Trichloracetic acid
($C_2HO_2Cl_3$)

Pushin and Rikovski, 1935

mol%	f. t.	E	min.
0	28	-	-
10	22	-	-
20	15	-	-
30	4.5	6	-
35	1.5	5.5	-
40	1	5.5	-
45	6	-	-
50	9	-	-
55	10.5	-	-
60	17	10	-
62.5	21	10	2.4
66.7	27	9.5	2.9
70	31	8.5	3.8
75	37.5	8	3.4
80	43	1	3.0
90	51	-	-
100	57	-	-

(1+2)

Guaethol ($C_8H_{10}O_2$) + Heptanoic acid ($C_7H_{14}O_2$)

Lecat, 1949

%	b. t.
0	216.5
15	215.2 Az
100	222.0

Salicylic aldehyde ($C_7H_6O_2$) + Isocaproic acid
($C_6H_{12}O_2$)

Lecat, 1949

%	b. t.
0	196.7
-	196.4 Az
100	199.5

Salicylic aldehyde ($C_7H_6O_2$) + Trichloracetic acid ($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.9	74.2	32.2
91.8	52.4	63.4	13.4
83.6	44.1	55.1	-6.9

m-Oxybenzaldehyde ($C_7H_6O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.9	59.7	39.3
92.7	52.6	49.1	59.6
85.6	46.3	37.6	75.9
79.9	39.9	25.5	88.9
72.7	30.3	14.8	98.5
65.8	24.2	0	107.4

m-Oxybenzaldehyde ($C_7H_6O_2$) + Benzoic acid
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	%	f. t.	E
100	121	45.3	92	-
87.5	116.5	37.4	87	83 "
77.5	111	30.4	85	"
67.7	105.5	20.0	91	"
60.1	101	12.1	97	-
52.3	96	0.0	105	-

m-Oxybenzaldehyde ($C_7H_6O_2$) + Salicylic acid
($C_7H_6O_3$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
100	155	-	33.3	107	-
86.4	150	-	26.4	98.5	-
72.9	143	90	18.4	91	90
60.9	134.5	90	10.4	97	-
53.0	127	-	0	105	-
39.3	114	90			

p-Oxybenzaldehyde ($C_7H_6O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.9	52.8	67.5 (1+1)
94.0	54.6	46.0	67.1
86.7	48.8		65.9 II
79.7	41.9	38.0	79.6
	49.7 II	29.9	90.9
72.8	57.7	20.4	101.5
66.2	62.7	9.9	109.6
61.3	65.5	0	115.6

Vanillin ($C_8H_8O_3$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	61.4	49.7	42.0
93.0	57.6	45.6	47.3
88.7	54.0	39.4	53.3
80.4	48.8	33.7	59.0
74.8	44.0	28.2	63.4
69.2	39.0	20.4	69.0
61.5	34.0	10.9	74.3
57.8	30.8	0	80.9
51.6	39.2		

Vanillin ($C_8H_8O_3$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Gibbons, 1915

mol%	f. t.	mol%	f. t.
100	57.3	48.8	28.0
91.4	51.7	43.6	37.2
84.0	44.5	43.4	37.8
77.6	35.0	41.3	40.0
72.3	25.5	39.2	41.7
66.4	12.0	35.3	44.5 (2+1)
65.6	10.3	43.6	21.0
66.0	14.2 (1+2)	37.8	39.3
64.4	13.8	35.3	44.5
62.7	12.8	31.5	50.5
60.8	14.6	25.4	60.1
58.8	17.8	22.4	63.3
58.2	18.0	17.5	68.2
56.3	21.2	13.3	71.7
54.0	24.0 (1+1)	6.3	76.6
52.1	21.0	0	80.9

Vanillin ($C_8H_8O_3$) + Benzoic acid ($C_7H_6O_2$)

Lehmann, 1914

%	f. t.	%	f. t.
0	81.8	10	77.3
1	81.5	15	76.5
2	81.0	20	74.0
3	80.5	25	72.0
4	80.0	30	80.0
5	80.0	35	83.5
6	79.4	40	90.0
7	79.0	45	90.0
8	79.0	50	90.0
9	78.2	100	121.4

Vanillin ($C_8H_8O_3$) + Salicylic acid ($C_7H_6O_3$)

Lehmann, 1914

%	f. t.	%	f. t.
0	81.8	10	78.8
1	81.3	15	76.8
2	81.1	20	75.0
3	80.6	25	73.0
4	80.3	30	90.0
5	79.5	35	102.0
6	79.3	40	108.0
7	79.3	45	115.0
8	79.0	50	123.0
9	79.0	100	155.0

Vanillin ($C_8H_8O_3$) + Acetylsalicylic acid
($C_9H_8O_4$)

Lehmann, 1914

%	f. t.	%	f. t.
0	81.8	10	78.5
1	81.5	15	77.0
2	81.2	20	76.0
3	81.0	25	78.0
4	80.8	30	105.0
5	80.5	35	"
6	80.3	40	"
7	80.0	45	112
8	79.8	50	115
9	79.2	100	128

Methyl salicylate ($C_8H_8O_3$) + Levulinic acid
($C_5H_8O_3$)

Lecat, 1949

%	b. t.	Dt mix
0	222.95	-
6	222.75 Az	-
49	-	-0.9
100	252	-

Ethyl salicylate ($C_9H_{10}O_3$) + Levulinic acid
($C_5H_8O_3$)

Lecat, 1949

%	b. t.	Dt mix
0	233.8	-
18	230.5 Az	-
52	-	-1.4
100	252	-

Ethyl salicylate ($C_9H_{10}O_3$) + Benzoic acid
($C_7H_6O_2$)

Lecat, 1949

%	b. t.	Sat. t.
0	233.8	-
94	233.65	25.5 Az
100	250.8	-

Salol ($C_{13}H_{10}O_3$) + Chloroacetic acid ($C_2H_3O_2Cl$)

Mameli and Mannessier, 1912-17

%	f. t.	%	f. t.
I		II	
100	61.40	100	56.40
92.39	59.42	97.92	55.90
86.34	58.00	88.73	53.40
72.97	54.40	73.83	48.70
68.38	52.30	56.60	43.60
65.92	52.30	56.60	43.60
64.12	51.45	49.88	39.90
62.03	50.60	43.89	37.90
60.87	50.10	43.71	37.10
57.02	48.80	33.33	31.20
51.24	46.70	32.19	30.10
48.13	45.44	30.30	29.32
46.02	44.40	27.73	27.54
42.03	42.20	26.89	26.60
35.85	38.50	25.66	25.40
33.43	36.80	23.67	25.68
30.02	33.70	22.92	26.12
27.40	32.00	20.13	28.05
25.74	30.20	19.24	29.00
25.42	30.10	16.65	29.82
24.65	28.20	9.18	34.30
22.65	27.38	5.12	36.70
16.02	30.12	3.33	38.12
9.56	34.40	0.00	40.85
3.87	37.80		

Salol ($C_{13}H_{10}O_3$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall and Booge, 1916

%	f. t.	%	f. t.
0	41.9	35.3	21.6
4.9	39.9	41.4	15.8
12.1	36.4	49.7	8.0
15.7	34.4	80.2	39.5
19.6	32.1	85.8	45.4
23.7	29.5	91.8	51.7
27.6	27.5	100	57.9
32.3	23.8		

Bromphenol (C_6H_5OBr) + Stearic acid ($C_{18}H_{36}O_2$)

Eykman, 1889

%	D f. t.
97.007	-0.75
93.183	1.755
86.98	3.47
82.71	4.74

2,4,6-Tri- (Dimethylaminomethyl)-Phenol ($C_{15}H_{27}DN_3$)+ Acetic acid ($C_2H_4O_2$)

Bondi and Parry, 1956 (fig.)

mol%	30°	η	40°
100	1	1	1
90	500	600	600
80	5000	2000	2000
70	4500	2000	2000
60	3000	9500	9500
50	1000	6000	6000
40	7000	3000	3000
30	5000	2000	2000
20	4000	1500	1500
10	3000	1100	1100
0	1500	1000	1000

mol%	50°	η	60°	70°
100	1	1	1	1
90	300	80	50	50
80	700	400	100	100
70	800	400	150	150
60	600	200	90	90
50	200	90	50	50
40	100	70	30	30
30	90	60	20	20
20	80	50	15	15
10	70	40	12	12
0	65	35	11	11

o-Nitrophenol ($C_6H_5O_3N$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	57.3	40.5	23.1
92.0	52.8	33.3	27.9
84.8	47.8	25.1	32.4
77.7	41.9	21.1	34.6
68.9	34.1	11.9	39.6
59.8	26.2	6.0	42.1
51.0	18.1	0.0	44.7
48.6	17.6		

o-Nitrophenol ($C_6H_5O_3N$) + Cinnamic acid
($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.
0.0	44.5	-	53.5	100
5.2	-	42.0	57.8	104
9.9	-	42.0	64.1	109
13.4	46.0	-	67.3	111
14.2	48.0	42.0	71.0	114
18.0	56.0	42.0	72.0	115
21.57	61.0	42.0	75.5	117
22.2	63.0	-	78.3	120
25.9	68.5	42.0	79.0	120
29.3	73.5	-	83.1	123
29.8	74.0	42.0	88.3	126
33.5	78.5	-	89.4	128
39.2	85.0	-	93.7	130
43.1	90.0	-	98.6	132.5
49.0	96.0	-	100	133

E: 11%

m-Nitrophenol ($C_6H_5O_3N$) + Succinic acid
($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.
0.0	96	-	42.1	155
5.6	101	91.5	47.5	156
6.4	105	-	48.8	158
10.6	117	-	54.0	160
15.2	128	91.5	54.7	161
16.3	131.5	-	62.5	162
19.2	136	91.5	65.7	166
23.0	141	91.5	74.7	170
25.4	144	-	82.1	172.5
33.6	150	-	89.2	177
			100	183

**m-Nitrophenol ($C_6H_5O_3N$) + Trichloroacetic acid
($C_2HO_2Cl_3$)**

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	57.3	53.8	60.4
92.6	53.3	39.9	71.4
85.5	49.2	30.2	78.1
78.4	44.9	19.4	84.7
71.4	40.5	10.1	90.1
64.3	50.9	0	99.3

**m-Nitrophenol ($C_6H_5O_3N$) + Cinnamic acid
($C_9H_8O_2$)**

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
0.0	95	-	53.5	95.5	77.5
14.7	87	-	59.8	101	77.5
23.0	82	-	66.2	107	77.5
29.6	77.5	77.5	74.7	133.5	-
37.5	77.5	77.5	82.3	120	-
44.2	86	-	88.7	124.5	-
48.6	90.0	77.5	100.0	133	-
50.2	91	77.5			

**p-Nitrophenol ($C_6H_5O_3N$) + Succinic acid
($C_4H_6O_4$)**

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.
0.0	114.5	-	64.1	168.5
3.5	108.7	-	70.6	171.5
10.0	120.5	107	76.6	174.0
13.2	126	107	80.8	175.5
17.0	132	-	82.3	176.0
19.9	137	-	87.8	179.0
29.2	147	-	92.7	180.5
39.0	154	-	96.5	182.0
50.6	161.5	-	100	183.0
57.4	165	-		

E: 4.5%

**p-Nitrophenol ($C_6H_5O_3N$) + Trichloroacetic acid
($C_2HO_2Cl_3$)**

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	57.3	59.4	65.1
94.1	54.4	45.5	79.7
87.7	51.2	30.3	92.6
81.8	47.8	66.0	103.7
75.8	44.0	0	113.8
70.6	51.0		

**p-Nitrophenol ($C_6H_5O_3N$) + Cinnamic acid
($C_9H_8O_2$)**

Kremann, Zechner and Drazil, 1924

%	f. t.	E	%	f. t.	E
0	114	-	49.0	93	83
4.8	111	-	59.2	102	83
8.7	108.5	-	67.9	109	-
12.8	104.5	-	77.0	117	-
18.0	101.0	-	87.2	123.5	-
21.1	98.5	-	95	129	-
30.7	91.1	83	100	133	-

E: 39%

Sorum and Durand, 1952

%	f. t.
0	114.0
E	78.0
100	133.0

**2,4-Dinitrophenol ($C_6H_4O_5N_2$) + Succinic acid
($C_4H_6O_4$)**

Kremann, Zechner and Drazil, 1924

%	f. t.	%	f. t.
0.0	112	52.8	169
6.3	148	54.9	169
13.9	158	63.0	171
23.8	162.5	69.1	172
35.8	166.0	78.0	174
46.2	167.5	90.1	178
47.6	167.5	100.0	183

E: 1% 110°

2,4-Dinitrophenol ($C_6H_3O_5N_2$) + Cinnamic acid
 ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E
0.0	112	-
9.7	106	-
16.7	101	-
18.4	100	-
20.0	99.0	91
23.1	97.0	91
26.8	95	91
28.6	93	91
33.3	91	-
41.0	91	-
43.1	94	-
45.8	96	-
47.4	97	91
50.1	100	91
51.2	101	-
51.5	101	91
58.2	107.0	-
65.2	112.5	91
73.3	117.5	-
82.4	124.5	-
92.7	130	-
100.0	133	-
(1+1)		

 Picric acid ($C_6H_3O_7N_3$) + Acetic acid ($C_2H_4O_2$)

Raoult, 1890

mol%	p
118°	
97.38	725.44
94.27	696.09
90.76	649.45

Kendall, 1916

mol%	f. t.	mol%	f. t.
0	118.5	74.7	76.7
24.0	106.5	83.0	65.1
36.4	100.1	87.5	55.1
46.5	94.9	96.4	14.1
55.0	90.0	100	16.4
64.1	84.7		

 Picric acid ($C_6H_3O_7N_3$) + Succinic acid
 ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f. t.	E
0.0	121.5	-
8.0	147.5	-
19.2	160.0	-
26.2	165.1	-
36.0	168.0	-
40.8	169.0	-
41.5	168.5	-
44.0	169.5	-
45.2	170.0	-
49.3	171	-
51.3	171	-
56.0	173	121
68.1	175	-
70.5	175	-
87.8	178	-
90.2	179	-
100.0	183	-

 Picric acid ($C_6H_3O_7N_3$) + Phenylacetic acid
 ($C_8H_8O_2$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
0	118.5	64.9	90.0
8.9	114.6	76.7	82.7
20.3	109.7	86.8	74.0
32.5	104.9	92.5	72.4
43.7	100.0	100	76.7
55.0	95.2		

 Picric acid ($C_6H_3O_7N_3$) + o-Toluic acid ($C_8H_8O_2$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
0	118.5	65.0	90.3
11.8	113.5	72.7	89.0
24.9	108.0	81.6	93.5
35.5	103.8	91.0	98.4
45.1	99.2	100.0	103.4
55.9	94.9		

Picric acid ($C_6H_3O_7N_3$) + m-Toluic acid ($C_8H_8O_2$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
0	118.5	58.1	93.1
7.3	114.9	65.0	89.9
14.3	112.0	72.2	90.2
22.0	108.8	80.0	96.0
29.6	105.7	89.8	102.5
39.0	101.7	100	109.6
49.6	97.0		

Picric acid ($C_6H_3O_7N_3$) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E
0.0	121.5	-
8.9	115	-
14.6	110	-
19.3	105.5	-
20.5	105	103
23.5	104	-
28.4	105	-
28.6	105	-
32.1	106	-
35.2	106	-
39.4	106.5	-
42.2	106	-
44.5	106	-
48.2	105.5	105
49.3	105	-
53.1	107	(1+1)
56.8	109	-
62.1	113	-
69.2	117.5	-
77.4	122	-
84.8	126.5	-
100.0	133.0	-

Pushin and Kozuhar, 1947

mol%	f.t.	mol%	f.t.
0	122	50	106
15	114	55	105
20	100.5	60	104
23	108	65	106
30	103	70	110
33	101	80	119
40	103	100	133
45	105		

 α -Naphthol ($C_{10}H_8O$) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E
100	183	-
95.2	181	-
90.9	179	-
87.0	177.5	-
83.3	176	-
76.9	174	-
74.1	173	-
69.0	170.5	90-90.5
64.5	168.5	-
58.8	167	90-90.5
52.4	165	-
47.6	162.5	90-90.5
43.5	161	-
35.5	157.5	90-90.5
31.0	155	-
25.1	151	-
23.1	148	90-90.5
16.7	140	90-90.5
13.0	135	-
9.1	125	90-90.5
4.8	110	-
0.0	96	-

E: 2%

 α -Naphthol ($C_{10}H_8O$) + Trichloroacetic acid
($C_2HCl_3O_2$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	57.5	43.0	67.3
91.2	52.6	35.7	72.5
83.1	47.7	28.6	76.9
75.2	42.1	21.3	81.6
66.8	48.7	14.9	85.3
59.0	55.1	7.6	89.9
50.6	61.5	0	94.2

 α -Naphthol ($C_{10}H_8O$) + Chloroacetic acid
($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

%	f.t.		%	f.t.
	I	II		I
100	61.8	56.6	62.90	47.5
91.04	58.5	53.1	57.69	51.7
83.60	56.0	50.0	48.03	58.2
72.76	51.3	46.0	33.83	69.2
67.50	-	43.9	25.83	75.4
66.76	48.7	45.2	0.00	94.0

α -Naphthol ($C_{10}H_8O$) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.	E
0.0	95	-	47.0	82	68
12.0	88	-	54.6	92	"
23.7	80	-	58.5	97	-
28.0	77	68	66.4	106	-
32.3	73	"	73.7	112	-
34.5	71	-	86.0	124	-
38.0	70.5	68	96.2	131	-
41.5	75	-	100.0	133	-

E: 37%

Sorum and Durand, 1952

%	f.t.
0	95.5
E	65.0
100	133.0

 β -Naphthol ($C_{10}H_8O$) + Succinic acid ($C_4H_6O_4$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.
0	121.5	-	38.1	157
1.4	119	117	38.2	157
3.6	119	-	44.9	161
4.5	121	-	53.4	165
8.3	128	117	64.8	170
13.1	136.5	117	72.9	173
19.1	143	-	78.7	176
21.7	145	-	85.5	178.5
28.5	150.5	-	92.0	181
31.5	153	-	100	183

E: 2.5%

 β -Naphthol ($C_{10}H_8O$) + Chloracetic acid
($C_2H_3O_2Cl$)

Mameli and Cocconi, 1923

%	f.t.	%	f.t.
I	II	I	
100	61.8	56.6	72.50
95.03	59.6	-	70.61
92.21	58.2	-	64.90
90.65	57.9	52.1	58.08
83.96	54.7	-	50.97
83.87	54.1	48.1	37.65
75.41	50.1	44.0	20.00
72.78	48.0	-	0.00

 β -Naphthol ($C_{10}H_8O$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1916

mol%	f.t.	mol%	f.t.
100	57.31	55.0	77.0
93.4	53.1	46.4	86.2
88.2	49.3	36.2	95.9
80.4	43.5	25.0	105.2
74.0	49.2	13.4	113.9
67.4	58.8	0	121.6
62.2	67.6		

 β -Naphthol ($C_{10}H_8O$) + Cinnamic acid ($C_9H_8O_2$)

Kremann, Zechner and Drazil, 1924

%	f.t.	E	%	f.t.	E
0	121	-	59.8	100	87
4.8	119	-	68.4	108.5	87
13.6	114	-	74.2	114	-
21.9	108.5	87	78.8	118	-
31.0	101.5	-	86	123	-
36.7	97.5	-	93.3	127	-
43.1	91.5	87	100	133	-
49.8	90	-			

E: 48%

Sorum and Durand, 1952

%	f.t.
0	121.0
E	82.0
100	133.0

METHYL ALCOHOL + ETHYL ALCOHOL

1095

XXXVIII. TWO ALCOHOLS AND TWO PHENOLS

Methyl alcohol (CH_3O) + Ethyl alcohol ($\text{C}_2\text{H}_5\text{O}$)

Heterogeneous equilibria .

Schmidt, 1921

mol %	p				
	20°	40°	60°	80°	100°
100	44	135	357	813	1701
90	49	147	382	858	1777
80	54	160	407	902	1853
70	59	172	432	948	1929
60	64	183	457	992	2005
50	69	195	482	1037	2082
40	74	206	504	1082	2157
30	79	218	529	1127	2234
20	84	230	553	1172	2312
10	89	242	578	1218	2388
0	94	254	601	1263	2464

Schmidt, 1926

mol %	p			
	0°	10°	20°	30°
100	12.7	23.6	44.1	78.4
90	14.8	25.9	48.6	86.8
80	17.1	28.7	54.1	96.2
70	18.3	32.1	59.2	106.8
60	20.7	36.4	64.4	113.9
50	22.4	39.2	69.0	121.4
40	23.6	42.1	74.6	130.3
30	25.2	45.8	79.1	140.4
20	27.1	48.3	84.4	148.3
10	29.3	51.4	89.1	156.1
0	31.9	55.2	95.2	162.6

mol %	p		
	40°	50°	60°
100	134.8	221.3	355
90	147.8	242.1	384
80	161.0	261.8	416
70	173.5	283.2	439
60	185.6	301.3	462
50	198.2	321.4	489
40	209.5	338.0	514
30	223.0	357.6	539
20	234.2	375.4	563
10	246.3	393.8	589
0	257.4	413.3	612

Morris, Munn and Anderson, 1942

%		P	P ₁	P ₂
L	V			
40°				
100	100	135.2	0	135.2
85.6	74.8	152.8	38.5	114.3
73.7	59.0	166.0	68.1	97.9
68.5	-	174.6	-	-
53.0	35.6	195.0	125.6	69.4
49.8	-	198.8	-	-
34.8	-	217.6	-	-
22.8	15.4	228.5	193.4	35.1
17.3	10.6	238.5	213.1	25.4
14.0	-	245.3	-	-
10.3	6.7	249.0	232.3	16.7
0	0	261.5	261.5	-

Amer, Paxton and Van Winkle, 1956

b. t.	mol%		b. t.	mol%	
	L	V		L	V
760 mm					
78.3	100	100	68.6	34.8	24.1
76.6	86.6	81.7	67.7	27.2	18.7
75.0	75.8	67.4	66.9	21.0	14.2
73.6	68.0	57.2	66.6	18.6	12.5
72.3	59.9	47.1	65.8	12.7	8.1
71.7	56.5	43.4	65.6	9.0	6.3
70.0	45.8	32.4	64.6	0	0

Haywood, 1899

%	b. t.	%	b. t.
762.6 mm			
0	65.1	54.0	70.65
11.9	66.1	57.6	71.15
25.4	67.35	63.5	72.0
34.6	68.3	75.1	73.0
44.1	69.4	88.9	76.5
50.0	70.1	100	78.75
53.8	70.6		

Amer, Paxton and Van Winkle, 1953

mol%	b. t.	mol%	b. t.
100	78.3	41.0	69.4
97.1	78.0	34.8	68.6
91.6	77.4	31.7	68.2
86.6	76.6	27.2	67.7
86.2	76.6	23.0	67.1
75.8	75.0	21.0	66.9
73.6	74.6	18.6	66.6
68.0	73.6	14.8	66.1
61.9	72.6	12.7	65.8
59.9	72.3	9.0	65.6
56.5	71.7	7.2	65.3
51.1	70.9	0.0	64.6
45.8	70.0		

Sapgir, 1929			
%	f. t.	%	f. t.
0	-97.8	83.1	-129.6
8.3	-103.1	89.8	-122.5
20.0	-111.8	100	-114.1
28.6	-120.9		
Johnson and Babb, 1956 (fig.)			
mol%	D		
	methyl alcohol	ethyl alcohol	
25°			
0	2.30	1.95	
10	2.20	1.80	
20	2.10	1.70	
40	1.75	1.35	
70	1.45	1.10	
95	1.20	1.00	
100	1.10	1.00	
Properties of phases.			
Herz and Kuhn, 1908			
%	d	%	d
25°			
0.0	0.7878	58.98	0.7878
8.75	.7880	89.6	.7872
15.23	.7879	95.63	.7869
19.31	.7877	100	.7867
Herz, 1918			
%	d	%	d
25°			
0.0	0.7881	58.98	0.7883
8.75	.7880	89.6	.7873
15.23	.7881	95.63	.7870
19.31	.7883	100	.7868
Doroshevski, 1911			
%	d	%	d
15°			
0	0.79602	61.08	0.79452
10.63	.79573	74.90	.79423
21.22	.79549	81.31	.79408
32.03	.79520	90.10	.79388
41.21	.79496	100	.79367
49.84	.79481		

Hirobe, 1925					
%	d				
25.02°					
0	0.7892				
29.18	.7879				
38.90	.7871				
55.79	.7865				
100	.7854				
Harms, 1938					
mol%	d		mol%	d	
	6°	30°		30°	
0	0.80438	0.781825	44.994	0.80263	0.78114
2.951	.804235	.78176	61.098	.80218	.781005
4.292	.80415	.78172	74.367	.80184	.780915
14.311	.80375	.78156	84.555	.80162	.78086
22.497	.80342	.78143	91.164	.801485	.780832
35.094	.80295	.78125	100	.80132	.780805
Jacobson, 1951					
vol%	d		vol%	d	
20°					
0	0.7937	57.1	0.7935		
24.7	.7940	76.1	.7929		
42.6	.7934	100	.7916		
49.9	.7933				
Schmidt, 1926					
%	Dv. 10 ⁴		%	Dv. 10 ⁴	
17°					
10	2.5	60	3.9		
20	4.1	70	3.2		
30	4.5	80	1.2		
40	4.7	90	0.8		
50	4.7				
Jacobson, 1951					
vol%	velocity of sound(10 ³ m/sec.)				
20°					
0	1.1301				
24.7	.1397				
42.6	.1458				
49.9	.1489				
57.1	.1514				
76.1	.1589				
100	.1673				

Jacobson, 1951					
vol%	π (adiab.)	vol%	π (adiab.)		
20°					
0	99.96	57.1	96.32		
24.7	98.25	76.1	95.16		
42.6	97.29	100.0	93.95		
49.9	96.77				
Jones, 1904					
vol%	η		$\tau \cdot 10^4$		
	0°	25°			
0	903.2	608.4	194		
25	1003	679.0	191		
50	1259	800.9	229		
75	1617	948.1	282		
100	2108	1145	337		
Hirata, 1908					
vol%	η (ethylalcohol=1)				
	25°				
75	0.8218				
87.5	.9062				
93.75	.9500				
96.875	.9744				
98.4375	.9870				
Herz and Kuhn, 1908 and Herz 1918					
%	η	%	η		
25°					
0.0	562.1	58.98	788.5		
9.75	586.2	89.6	984.3		
15.23	605.0	95.63	1047		
19.31	617.5	100	1092		
Bingham, White and al., 1913					
%	η				
	25°	35°	45°	55°	65°
0	548.2	478.5	420.2	371.0	-
26.16	639.3	552.5	481.0	423.2	-
49.60	737.4	635.3	548.2	476.0	414.6
73.85	880.2	746.2	635.7	545.8	-
100	1098.9	916.6	765.7	645.2	550.9
Morgan and Scarlett, 1917					
%	σ				
	0°	30°	50°		
100	23.090	20.756	19.200		
49.75	23.395	20.909	19.235		
0	23.643	21.058	19.446		
Doroshevski, 1911					
%	n_D	%	n_D		
15°					
0	1.33057	61.08	1.35070		
10.63	.33390	74.90	.35517		
21.22	.33740	81.31	.35718		
32.03	.34115	90.10	.36010		
41.21	.34422	100	.36330		
49.84	.34697				
Amer, 1953					
mol%	n_D	mol%	n_D		
20°					
100	1.36152	31.7	1.34114		
86.2	.35756	23.0	.33810		
73.6	.35406	14.8	.33507		
61.9	.35073	7.2	.33208		
51.1	.34750	0.0	.32904		
41.0	.34426				
Thwing, 1894					
%	ϵ	%	ϵ		
15°					
0	34.05	60	26.20		
10	31.91	70	25.71		
20	30.21	80	25.34		
30	28.54	90	25.36		
40	27.59	100	25.02		
50	26.78				

Thermal constants.

Bose, 1907

%	U
25°	
0.0	0.6078
29.83	.5996
55.00	.5948
76.98	.5918
100	.5819

Hirobe, 1925

mol%	Q mix.
25.02°	
29.18	-2.1
38.90	-1.8
55.79	-0.6

Schmidt, 1926

%	Q mix (cal/g)	%	Q mix (cal/g)
16°			
10	0.0024	60	0.095
20	.044	70	.094
30	.064	80	.082
40	.075	90	.050
50	.086		

Methyl alcohol (CH_3O) + Propyl alcohol ($\text{C}_3\text{H}_8\text{O}$)

Schmidt, 1926

mol%	P			
	0°	10°	20°	30°
100	3.5	7.4	15.1	28.8
90	5.6	12.3	24.4	43.5
80	8.2	17.4	31.9	58.7
70	11.6	21.8	40.5	73.9
60	14.9	26.7	48.7	88.3
50	18.2	31.6	56.0	102.0
40	20.7	36.3	63.8	115.7
30	22.8	41.2	72.0	128.5
20	25.3	44.8	80.0	140.7
10	28.0	50.8	88.0	152.2
0	31.9	55.2	96.3	162.6
40° 50° 60°				
100	52.7	91.3	155.4	
90	75.3	126.0	201.6	
80	100.6	163.8	252	
70	123.8	202.2	303	
60	144.5	234.6	348	
50	165.8	268.4	402	
40	186.0	299.3	449	
30	206.2	328.0	499	
20	226.3	359.7	546	
10	245.8	389.2	593	
0	261.7	413.3	643	

Hill and van Winkle, 1952

%		mol%		b. t.
V	L	V	L	
760 mm				
76.0	92.2	74.0	91	89.0
53.5	82.8	54.5	82.8	83.2
40.6	74.9	33.2	68.1	79.7
37.3	72.1	22.3	55.5	78.3
32.3	67.4	15.8	44.5	76.7
25.1	58.4	11.1	34.8	73.9
17.8	47.9	7.9	26.2	71.3
12.1	37.5	4.9	18.6	69.4
5.2	18.9	2.9	11.7	66.7

Herz and Kuhn, 1908 and Herz, 1918

%		%	
d		d	
25°			
0	0.7878	91.8	0.7992
11.11	.7894	93.75	.7995
23.8	.7907	96.6	.7999
65.2	.7954	100	.8004

Doroshevski, 1911				Kremann, Meingast and Gugl, 1914			
%	d	%	d	mol%	Dv		
					20°	70°	
15°				25	+0.07	-0.07	
0	0.79602	50.29	0.80104	50	+0.05	-0.12	
4.37	.79651	59.62	.80215	75	+0.15	+0.03	
9.88	.79692	68.12	.80325				
20.29	.79788	78.94	.80466				
34.63	.79936	88.04	.80582				
40.90	.80005	100	.80753				
Kremann and Meingast, 1914				Schmidt, 1926			
t	d	t	d	%	Dv.10 ⁴	%	Dv.10 ⁴
0 mol%		25 mol%		17°			
10.0	0.8100	15.2	0.8000	90	-7	40	-10
20.0	-	10.0	-	80	-10	30	-8
20.8	0.7912	20.1	0.7955	70	-13	20	-5
31.0	.7818	26.8	.7900	60	-12	10	-3
38.0	.7752	44.5	.7741	50	-11		
41.2	.7721	59.5	.7610				
51.0	.7633	60.0	-				
60.0	-						
65.8	.7500						
50 mol%		75 mol%		Herz and Kuhn, 1908 and Herz 1918			
14.8	0.8038	16.2	0.8051	%	η	%	η
20.0	-	20.0	-	25°			
26.1	0.79405	25.0	0.7980	0	562.1	91.8	1638
43.8	.7794	43.8	.7819	11.1	607.7	93.75	1772
58.1	.7670	45.0	.7805	23.8	799.7	96.6	1844
		56.0	.7710	65.2	1074	100	1915
		60.8	.7670				
100 mol%		100 mol%		Kremann and Meingast, 1914			
15.5	0.8075	47.2	0.7807	t	σ	t	σ
28.5	.7964	60.0	.7700	0 mol%		25 mol%	
39.4	.7875	65.1	.7653	10.0	23.58	15.2	23.37
				20.8	22.73	20.1	22.94
				31.0	22.09	26.8	22.51
				38.0	21.33	44.5	21.13
				41.2	21.22	59.5	19.71
				51.0	20.53		
				65.8	18.92		
				50 mol%		75 mol%	
				14.8	23.64	16.2	23.76
				26.1	22.83	25.0	23.19
				43.8	21.64	43.8	21.84
				58.1	20.64	45.0	21.72
						56.0	20.79
						60.8	20.23
				100 mol%		100 mol%	
				15.5	23.94	47.2	22.00
				28.5	23.12	60.0	21.07
				39.4	22.55	65.1	20.58
Hirobe, 1925							
mol%	d						
25.05°							
0	0.7884						
20.38	.7916						
33.34	.7935						
55.49	.7960						
100	.7998						

Doroshevski, 1911			
%	n_D	%	n_D
15°			
0	1.33053	50.29	-
4.37	.33312	59.62	1.36423
9.88	.33603	68.12	.36900
20.29	-	78.94	.37518
34.63	1.35002	88.04	.38036
40.90	.35394	100	.38726

Denney and Cole, 1955			
t	ϵ	t	ϵ
0%		20%	
0	37.92	-1.6	35.12
-22.5	43.53	-31.5	42.27
-40.6	49.00	-70.3	55.19
-62.6	57.35	-91.6	64.67
-76.7	63.26	-104.0	71.46
-86.0	67.91	-114.9	77.56
-96.7	73.76	-148.0	102.7
-103.2	77.70	-152.7	104.8
-109.9	82.17		
30%		50%	
0	33.25	0	30.43
-38.3	42.36	-38.0	38.52
-71.1	52.96	-72.8	48.78
-97.2	64.67	-96.3	58.07
-115.8	74.92	-113.2	66.55
-135.8	89.62	-134.6	79.88
-146.3	98.68	-141.6	85.17
-150.2	102.5	-148.4	90.86
-154.2	107.0		
79%		79%	
0	26.41	-123.9	62.49
-34.7	32.91	-133.1	67.68
-73.1	42.29	-136.7	69.81
-96.4	50.16	-142.7	73.52
-109.9	55.68		

Kremann, Meingast and Gugl, 1914			
mol%	U	Q mix(cal/g)	
34°			
0	0.617	16°	
25	.604	-0.448	-0.500
50	.605	-0.312	-0.415
75	.615	-0.178	-0.232
100	.640		

Hirobe, 1925			
mol%	Q mix.		
25.05°			
20.38	-21.8		
33.34	-23.1		
55.49	-17.6		

Schmidt, 1926			
%	Q mix(cal/g)	%	Q mix(cal/g)
14°			
90	-0.18	40	-0.49
80	-0.35	30	-0.41
70	-0.49	20	-0.30
60	-0.56	10	-0.17
50	-0.55		

Methyl alcohol (CH ₃ O) + Isopropyl alcohol (C ₃ H ₈ O)					
Ballard and van Winkle, 1952					
mol%		b.t.	mol%		b.t.
V	L		V	L	
760 mm					
4.65	9.90	66.2	43.00	59.20	74.8
10.90	21.00	67.9	57.15	70.70	77.1
20.00	33.95	70.2	70.40	80.50	78.9
31.50	47.80	72.7	86.80	91.90	81.0

Methyl alcohol (CH ₃ O) + Butyl alcohol (C ₄ H ₁₀ O)					
Hill and van Winkle, 1952					
%		mol%		b.t.	
V	L	V	L		
58.9	94.5	40.4	89.2	102.5	
42.3	89.0	25.0	79.5	95.3	
33.1	84.0	14.0	63.4	89.0	
26.4	79.0	9.1	50.2	81.2	
23.8	76.1	6.2	39.3	81.0	
18.5	69.4	3.0	30.2	79.4	
13.1	60.0	2.1	15.6	74.8	
8.6	46.9	1.3	9.8	71.4	
0	0	0	0	64.7	

Methyl alcohol (CH ₄ O) + Isobutyl alcohol (C ₄ H ₁₀ O)						Doroshevski, 1911			
Udovenko and Frid, 1948						%	d	%	d
mol% L	50°		mol% V	60°		15°			
100	100		100	100		0	0.79602	39.47	0.79854
90.0	49.2		52.9	55.3		5.34	.79631	49.42	.79943
80.0	30.7		34.0	36.4		14.19	.79679	70.93	.80177
70.0	21.4		23.9	25.7		19.72	.79709	89.84	.80423
60.0	15.1		17.3	18.7		22.55	.79731	100	.80567
50.0	11.1		12.7	13.8					
40.0	7.9		9.2	10.0					
30.0	5.5		6.4	6.9					
20.0	3.4		4.0	4.4					
10.0	1.6		1.9	2.1					
0.0	0		0	0					
mol%	50°		p	60°		25.05°			
100	56.0		96.0	157.0		0	0.7884	48.60	0.7941
90.0	103.0		163.9	256.8		14.92	.7903	100	.7981
80.0	147.1		227.4	349.7		28.65	.7918		
70.0	187.6		287.1	434.8					
60.0	228.3		342.5	518.1					
50.0	263.3		394.8	592.6					
40.0	298.4		443.7	664.5					
30.0	330.0		490.4	734.4					
20.0	363.6		535.7	798.9					
10.0	392.3		579.6	860.1					
0.0	422.0		620.0	920.1					
mol%	p ₁	p ₂	mol%	p ₁	p ₂	Janecke, 1933			
						%	d	%	d
						15°			
90	77.2	86.7	40	402.9	40.8	0	0.7910	100	0.8026
80	150.0	77.4	30	459.2	31.2	25.75	.7968		
70	218.6	68.5	20	514.4	21.3				
60	283.2	59.3	10	568.6	11.0				
50	344.7	50.1							
Janecke, 1933						Doroshevski, 1911			
%	b. t.	%	b. t.	%	b. t.	%	n _D	%	n _D
L	V	L	V	L	V	15°			
100	100	107.88	30	9.0	68.1	0	1.33053	39.47	1.35710
95	79.0	97.5	15	3.5	66.0	5.34	.33484	49.42	.36372
85	54.2	87.3	5	1.0	65.1	14.19	.34055	89.84	.39102
70	33.0	78.0	0	0	64.72	22.55	.34620	100	.39750
50	16.0	72.0							
Janecke, 1933						Janecke, 1933			
%	b. t.	%	b. t.	%	b. t.	%	n _D	%	n _D
L	V	L	V	L	V	15°			
100	100	107.88	30	9.0	68.1	0	1.3287	46.44	1.3591
95	79.0	97.5	15	3.5	66.0	24.55	.3444	54.48	.3644
85	54.2	87.3	5	1.0	65.1	25.75	.3461	100	.394
70	33.0	78.0	0	0	64.72				
50	16.0	72.0							
Hirobe, 1925						Hirobe, 1925			
mol%	50°		mol%	60°		mol%	Q mix.		
100	100		100	100					
90.0	49.2		52.9	55.3					
80.0	30.7		34.0	36.4					
70.0	21.4		23.9	25.7					
60.0	15.1		17.3	18.7					
50.0	11.1		12.7	13.8					
40.0	7.9		9.2	10.0					
30.0	5.5		6.4	6.9					
20.0	3.4		4.0	4.4					
10.0	1.6		1.9	2.1					
0.0	0		0	0					
mol%	50°		p	60°		25.05°			
100	56.0		96.0	157.0		0	0.7884	48.60	0.7941
90.0	103.0		163.9	256.8		14.92	.7903	100	.7981
80.0	147.1		227.4	349.7		28.65	.7918		
70.0	187.6		287.1	434.8					
60.0	228.3		342.5	518.1					
50.0	263.3		394.8	592.6					
40.0	298.4		443.7	664.5					
30.0	330.0		490.4	734.4					
20.0	363.6		535.7	798.9					
10.0	392.3		579.6	860.1					
0.0	422.0		620.0	920.1					
mol%	p ₁	p ₂	mol%	p ₁	p ₂	Hirobe, 1925			
90	77.2	86.7	40	402.9	40.8				
80	150.0	77.4	30	459.2	31.2				
70	218.6	68.5	20	514.4	21.3				
60	283.2	59.3	10	568.6	11.0				
50	344.7	50.1							
mol%	p ₁	p ₂	mol%	p ₁	p ₂	25.05°			
90	77.2	86.7	40	402.9	40.8	14.92		-40.6	
80	150.0	77.4	30	459.2	31.2	28.65		-39.4	
70	218.6	68.5	20	514.4	21.3	48.60		-27.7	
60	283.2	59.3	10	568.6	11.0				
50	344.7	50.1							

Methyl alcohol (CH_3O) + Amyl alcohol ($\text{C}_5\text{H}_{12}\text{O}$)

Hill and van Winkle, 1952

%		mol%		b. t.
V	L	V	L	
82.5	99.2	27.4	87.4	122.5
54.4	95.7	14.4	76.6	113.1
34.6	91.0	6.7	59.2	99.4
21.6	84.8	3.5	45.9	87.4
10.9	72.3	2.4	35.0	79.2
10.2	71.0	1.6	26.6	78.2
6.5	62.6	1.2	19.5	73.3
3.2	40.8	0.8	13.5	67.5
1.8	25.8	0.5	8.3	66.1

Charpy, 1893

vol%	d	vol%	d
15°			
0	0.792	66.7	0.805
16.7	.794	83.3	.808
33.3	.797	100.0	.812
50.0	.801		

Methyl alcohol (CH_3O) + Isoamyl alcohol
($\text{C}_5\text{H}_{12}\text{O}$)

Udovenko and Frid, 1948

mol% L	mol% V		
	50°	60°	70°
90	23.1	37.1	31.9
80	12.2	14.6	17.2
70	6.6	9.5	11.2
60	5.3	6.5	7.8
50	3.8	5.7	5.6
40	2.8	3.3	4.0
30	1.8	2.2	2.7
20	1.1	1.4	1.6
10	0.5	0.6	0.8

mol%	P ₁	P ₂	mol%	P ₁	P ₂
60°					
90	77.6	28.9	40	405.1	13.8
80	151.1	25.9	30	461.3	10.5
70	220.4	23.0	20	518.8	7.1
60	285.2	19.9	10	570.3	3.7
50	347.8	16.9			

mol%	P		
	50°	60°	70°
100	17.5	32.0	57.5
90	68.4	106.5	165.5
80	116.7	177.0	270.5
70	160.7	243.4	368.9
60	205.5	305.1	460.9
50	265.7	364.7	546.3
40	282.8	418.9	622.1
30	320.3	471.8	701.4
20	355.7	525.9	779.0
10	388.6	574.0	851.1
0	422.0	620.0	920.1

Hirobe, 1925

mol%	d	mol%	d
25.05°			
0	0.7886	48.60	0.8014
13.16	.7930	100	.8073
23.17	.7957		

Landolt, 1865

%	d	n _D
20°		
0	0.7950	1.3279
47.8	.8024	.3640
100	.8121	.4057

Hirobe, 1925

mol%	Q mix.
25.05°	
13.16	-31.6
23.17	-44.8
48.60	-45.7

Methyl alcohol (CH_3O) + Decyl alcohol ($\text{C}_{10}\text{H}_{22}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
6.6	-40.0
32.7	-20.0
92.9	0.0
100	+6.88

Methyl alcohol (CH_3O) + Lauryl alcohol ($\text{C}_{12}\text{H}_{26}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
0.5	-40.0
2.9	-20.0
42.2	0.0
96.0	+20.0
100	23.95

Methyl alcohol (CH_3O) + Tetradecyl alcohol
($\text{C}_{14}\text{H}_{30}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
0.2	-20.0
4.4	0.0
61.3	+20.0
89.7	30.0
100	38.26

Methyl alcohol (CH_3O) + Cetyl alcohol ($\text{C}_{16}\text{H}_{34}\text{O}$)

Fischer, 1940

mol%	f.t.
100.0	49.1
60.0	37.6
52.6	35.0
36.0	27.8

Hoerr, Harwood and Ralston, 1944

%	f.t.
2.9	0.0
9.1	20.0
51.2	30.0
85.5	40.0
100.0	49.62

Methyl alcohol (CH_3O) + Octadecyl alcohol
($\text{C}_{18}\text{H}_{38}\text{O}$)

Hoerr, Harwood and Ralston, 1944

%	f.t.
3.9	20.0
6.5	30.0
59.3	40.0
100	57.98

Fischer, 1940

mol%	f.t.	tr.t.
100	57.9	-
83.9	54.7	53.5
63.5	49.5	-
36.6	39.9	-

Methyl alcohol (CH_3O) + Methoxy glycol ($\text{C}_3\text{H}_8\text{O}_2$)

Simonetta and Barakan, 1947

mol%	n_D	mol%	n_D
22°			
100	1.4021	45.50	1.3773
80.50	.3961	26.60	.3613
51.75	.3808	0	.3280

mol%		mol%	
L	V	L	V
22°			
11.3	1.5	53	9.5
17.5	2.5	62	11
27	3.5	65.5	12
33.5	5	74.5	20.5
38.0	5.3	84	31
41	6.5	87.5	37
45.5	7.3	95.0	71

Methyl alcohol (CH_4O) + Glycerol ($\text{C}_3\text{H}_8\text{O}_3$)

Dulitskaya, 1945

mol%	p		
	25°	50°	62.5°
0.00	124.9	406.0	688.0
17.13	110.0	359.0	602.0
35.24	95.0	306.5	509.0
52.47	76.0	243.0	402.5
72.10	48.0	153.0	255.0

Skirrow, 1902

%	p		
	25°		
0		122	
39.6		106	
60.5		91	
77.1		63	

Campbell, 1915

%	p	%	p
40°			
0	257.4	81.67	137.5
16.32	244.8	91.45	93.8
43.73	222.9	93.74	62.1
61.72	199.6	100	0
74.47	167.1		

Campbell, 1915

%	d	%	d
56°			
0	0.7604	68.98	1.0620
9.60	.7963	76.11	.1006
33.83	.8942	83.24	.1399
43.78	.9386	90.28	.1853
49.49	.9642	97.04	.2227
65.01	1.0418	100	.2400

Danusso, 1955

mol%	d	mol%	d
30°			
0	0.7832	12.05	0.8943
2.34	.8067	29.24	1.0057
2.95	.8125	31.26	.0167
5.31	.8364	37.03	.0464
		50.65	.1080
		66.07	.1631
		75.17	.1902
		85.88	.2204
		100	.2510

Schmidt and Jones, 1909

%	η	
	25°	35°
0	565.4	491.8
25	1962	1539
50	9280	6379
75	60730	35520
100	330000	294030

Guy and Jones, 1911

25°	η	35°	45°	$\tau \cdot 10^4$	25-35°	35-45°
0%						
584.2	506.6	446.9		157	139	
1886	1481	1190		274	240	
9657	6512	4446		484	468	
62420	35190	20870		763	681	
606700	275100	135200		1240	1010	

Danusso, 1955

mol%	v	mol%	v
30°			
0	1092	37.03	1478
2.34	1120	50.65	1586
2.95	1129	66.07	1703
5.31	1160	75.17	1759
12.05	1237	85.88	1825
29.24	1405	100	1908
31.26	1422		

v=ultrasound velocity (m/sec.)

Helmreich, 1914

vol%	U	vol%	U
0-50°			
0	0.61614	60	0.62715
10	.61604	70	.62357
20	.61720	80	.62198
30	.61766	90	.61743
40	.62024	100	.61230
50	.62793		

Methyl alcohol (CH ₃ O) + Rhamnose-1-hydrate (C ₆ H ₁₄ O ₆)			
Upson, Fluevog and Hebert, 1935			
mol%	f. t.	mol%	f. t.
16.7	35.9	44.0	53.1
24.4	42.6	49.9	56.0
35.5	49.1	61.4	60.5

Methyl alcohol (CH ₃ O) + Glucose (C ₆ H ₁₂ O ₆)			
Gillis and Nachtergaele, 1934			
%	f. t.	%	f. t.
1.50	0	49.49	105
2.29	25	54.59	106.6
3.40	35	64.82	108.6
4.90	50	69.81	113
9.97	76.1	74.90	117.2
15.30	87.5	78.26	119.2
24.41	98	80.21	122.8
27.59	99.5	87.20	125.9
34.45	103.5	92.00	128.5
40.00	104.2		

Methyl alcohol (CH ₃ O) + Methyl malate 1 (C ₆ H ₁₀ O ₅)			
Walden, 1906			
%	D b. t.	%	D b. t.
1.40	+0.056	14.23	+0.760
4.15	.179	17.13	.959
7.52	.359	19.42	1.115
10.88	.555		

Grossmann and Landau, 1910						
g/100 cc		(α)				
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.970	-6.30	-7.10	-8.51	-10.71	-11.61	-11.91
24.985	-6.48	-7.48	-8.93	-10.81	-11.29	-
12.4925	-6.80	-7.76	-8.73	-10.33	-10.89	-
4.854	-7.42	-8.03	-8.65	-9.68	-10.09	-10.51
2.482	-9.27	-9.27	-9.27	-9.27	-9.27	-

Methyl alcohol (CH ₃ O) + Ethyl malate. (C ₈ H ₁₄ O ₅)			
Walden, 1906			
		%	D b. t.
		4.13	+0.171
		6.71	+0.295
		8.98	+0.415
		11.27	+0.539
		13.61	+0.669

Methyl alcohol (CH ₃ O) + Methyl tartrate (C ₆ H ₁₀ O ₆)				
Yen-ki-Heng, 1936				
t	d	α		
		Hg _y	Hg _g	Hg _i
22.545%				
1	0.9049	0.945	0.65	-4.70
13.5	.8938	1.515	1.34	-3.08
23	.8853	2.08	1.93	-1.965
32	.8773	2.605	2.36	-1.125
42.5	.8685	2.90	2.0	-0.305
52.5	.8596	3.20	3.265	+0.745

Methyl alcohol (CH_3O) + Ethyl tartrate ($\text{C}_8\text{H}_{14}\text{O}_6$)

Walden, 1906

%	D b.t.	%	D b.t.
2.89	+0.092	12.61	+0.573
6.50	.258	15.21	.719
9.69	.418		

Patterson, 1901

t	d	t	d	t	d
100%		75%		50%	
16.8	1.2087	18.3	1.0842	19.8	0.9707
37.2	.1878	32.8	.0692	34.4	.9561
46.8	.1783	39.7	.0626	44.6	.9460
58.3	.1665	53.2	.0488	51	.9395
68.1	.1566	17.6	.0853		
76.2	.1484				
99.4	.1248				
25%		10%		5%	
14.1	0.8799	22	0.8210	20.2	0.8068
27.3	.8671	30.6	.8128	33.8	.7939
36	.8585	39.6	.8040	46.7	.7815
43.2	.8515	45.8	.7980	18.3	.8068
		14.2	.8286		
0%					
16	0.7953				
29	.7830				
38.4	.7741				
48	.7646				

t	(α) _D	t	(α) _D	t	(α) _D
100%		75%		50%	
10.8	6.63	12.5	8.24	13	9.80
11.3	6.66	14.9	8.59	14.7	10.06
16.0	7.21	17.1	8.85	16	10.04
20.1	7.67	24.7	9.61	17	10.21
25.1	8.25	33.7	10.43	18.2	9.87
29.9	8.70	40.8	11.05	24.9	10.94
33.7	9.10	45.6	11.38	34.8	11.76
37.6	9.56	51.1	11.91	38.2	12.00
46.1	10.24			43.2	12.38
55.1	10.94			46.9	12.65
67.2	.11.75			53.8	13.00
77.1	12.30				
84.4	12.73				
89.4	12.97				
100	13.47				
25%		10%		5%	
13.2	10.57	12.8	10.68	12.2	10.74
18.3	11.06	13	10.88	13.2	10.92
18.9	11.10	16.2	11.17	14.8	11.36
19.2	11.12	16.7	11.21	24.3	11.91
20	11.20	18.9	11.36	32.5	12.54
25	11.66	27	12.09	40.2	13.24
33.4	12.33	35.5	12.81	49.2	13.60
39.4	12.76	42.6	13.23		
42.8	13.00	46.7	13.55		
45.6	13.20	53	13.81		
48.1	13.37				

Walden, 1906

%	d	(α) _D
50°		
15.78	0.826	13.82
7.12	.791	13.88
2.93	.776	13.50
20°		
15.78	0.855	11.32
15.21	.845	11.19
7.12	.818	11.02
2.93	.805	11.18

Landolt, 1876 and 1877

%	d	(α) _D
20°		
0	0.80915	-
15.3065	.85675	11.243
26.9681	.89462	11.070
39.9196	.93808	10.915
56.6527	1.00066	10.411
77.4567	.08820	9.649
100	.1989	8.309

Patterson and Montgomerie, 1909

50% 39.63 vol% $D_v = -1.32\%$ $D_t = +0.05^\circ$

Methyl alcohol (CH_3O) + Propylmercaptan
($\text{C}_3\text{H}_7\text{S}$)

Lecat, 1949

%	b.t.
0	64.65
65	58.0 Az
100	67.3

Methyl alcohol (CH_4O) + Cyclopentanol ($\text{C}_5\text{H}_{10}\text{O}$)

Labruyere-Verhavert, 1951

mol%	f.t.	E	mol%	f.t.	E
0	-97.0	-	57.5	-105.8	-130
5.9	-105.1	-	64.6	-95.0	-
13.5	-113.1	-	66.9	-92.6	-
24.1	-120.0	-129.5	79.4	-76.6	-
31.4	-124.1	-129.8	89.1	-50.0	-
50.2	-118.1	-129.9	91.7	-44.3	-
55.7	-109.1	-129.9	100	-19.5	-

Methyl alcohol (CH_4O) + Cyclohexanol ($\text{C}_6\text{H}_{12}\text{O}$)

Weissenberger and Schuster, 1925

mol%	p	mol%	p
20°			
66.7	41	33.3	74
57.1	51	25.0	81
50.0	59	20.0	85
40.0	68	0.0	96

mol%	η (water=1)	σ	mol%	η (water=1)	σ
20°					
100	14.5	0.474	33.3	1.7	0.385
66.7	5.2	.439	25.0	1.30	.366
57.1	3.6	.425	20.0	1.20	.353
50.0	2.9	.415	0.0	0.61	.312
41.8	2.3	.399			

Methyl alcohol (CH_4O) + o-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Henke, 1925

mol%	p	η (water=1)	σ
20°			
66.7	36.8	4.71	0.385
50.0	54.2	3.17	.366
40.0	65.8	2.47	.360
33.3	73.8	2.06	.353
28.0	79.2	1.67	.348
25.0	82.0	1.55	.339

Methyl alcohol (CH_4O) + m-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Henke, 1925

mol%	p	η (water=1)	σ
20°			
66.7	37.2	8.26	0.372
50.0	57.6	4.54	.364
40.0	69.4	3.08	.355
33.3	77.9	2.43	.333
28.0	82.8	1.99	.332
25.0	84.1	1.70	.322

Methyl alcohol (CH_4O) + p-Methylcyclohexanol
($\text{C}_7\text{H}_{14}\text{O}$)

Weissenberger, Schuster and Henke, 1925

mol%	p	η (water=1)	σ
20°			
66.7	38.5	9.36	0.377
50.0	57.5	4.83	.370
40.0	69.9	3.22	.359
33.3	77.4	2.49	.356
28.0	82.0	2.01	.352
25.0	81.9	1.71	.339

Methyl alcohol (CH_4O) + Borneol ($\text{C}_{10}\text{H}_{18}\text{O}$)

Kanonnikov, 1885

%	t	d	H_α	n _D	H_β
22.5	21	0.82829	1.38397	1.38592	1.39031
0	20	.79177	.35930	.36067	.36543

Darmois, 1908

%	$(\alpha)_D$
2.24	-29.2
11.25	-28.8
41.9	-28.15
57.95	-28.00
72.2	-27.6

Ethyl alcohol (C_2H_6O) + Propyl alcohol (C_3H_8O)

Parks and Schwencke, 1924

%		mol%		b. t.	p_1
L	V	L	V		
0	0	0	0	78.4	761
12.50	7.0	9.8	5.4	79.8	720
25.07	14.0	20.4	11.4	81.4	674
37.60	22.6	31.6	18.7	83.1	614
49.98	31.2	43.4	26.2	85	562
62.51	41.7	56.1	35.9	87.1	488
75.00	56.5	69.7	50.6	89.3	386
87.46	77.7	84.2	73.1	92.7	205
100	100	100	100	97.2	0

%		%	
L	V	L	V
25° 761 mm			
0	0	62.51	39.7
12.50	7.4	75.00	54.5
25.07	12.5	87.46	73.0
37.60	20.7	100	100
49.98	28.5		

mol%		p	p ₁	p ₂
L	V			
25°				
0	0	59.0	59.0	0.0
16.4	7.6	53.0	49.0	4.0
34.4	18.7	47.5	39.1	8.4
54.6	32.2	40.4	27.4	13.0
75.9	56.0	32.3	14.3	18.9
100	100	23.2	0.0	23.2

Udovenko and Frid, 1948

mol%			p	mol%			p
L	V	V		V	V		
50°				70°		80°	
0	0	222.0	0	548.0	0	813.0	
10	4.8	211.8	5.3	526.0	5.5	780.1	
20	9.9	200.6	10.8	501.0	11.2	744.8	
30	15.3	190.2	16.7	476.5	17.2	709.6	
40	21.5	179.0	23.1	451.6	23.9	674.0	
50	28.4	167.4	30.5	424.2	31.1	637.0	
60	36.4	153.7	38.7	392.5	39.4	592.7	
70	46.4	139.1	48.9	360.1	49.8	544.1	
80	59.1	123.6	61.3	324.1	62.4	491.3	
90	75.8	108.0	77.7	285.5	78.2	437.0	
100	100	91.0	100	247.5	100	381.0	

mol%		p	p ₁	p ₂
L	V			
60°				
0	0	353.3	353.3	-
10	5.1	338.2	321.1	17.1
20	10.3	321.4	288.3	33.1
30	16.0	304.8	256.0	48.8
40	22.3	287.5	223.4	64.1
50	29.4	269.1	190.1	79.0
60	37.6	248.5	155.2	93.3
70	47.6	226.5	118.7	107.8
80	60.2	202.9	80.8	122.1
90	76.8	178.1	41.3	136.8
100	100	152.0	-	152.0

Doroshevski, 1911

%	d	%	d
15°			
0.00	0.79367	67.27	0.80292
10.72	.79513	78.34	.80448
24.39	.79698	88.63	.80592
34.18	.79832	100	.80753
50.22	.80055		

Herz and Kuhn, 1908

%	d	%	d
25°			
0	0.7867	88.6	0.7973
8.1	.7886	91.2	.7979
17.85	.7902	95.2	.7986
56.6	.7926	100	.8004

Herz, 1918

%	d	%	d
25°			
0	0.7868	88.6	0.7972
8.1	.7886	91.2	.79725
17.85	.7902	95.2	.798
56.6	.7920	100	.8005

Hirobe, 1925			
mol%	d	mol%	d
25.10°			
0	0.7860	64.59	0.7959
19.70	.7894	100	.7998
39.69	.7923		
Parks and Schwencke, 1924			
%	mol%	d	%
25°			
0	0	0.7863	62.51
12.50	9.8	.7886	75.00
20.07	20.4	.7904	87.46
37.60	31.6	.7923	100
49.98	43.4	.7942	
Hirata, 1908			
%	η	%	η
(water=1)			
25°			
25	1.1406	3.125	1.0185
12.5	.0684	1.5625	.0088
6.25	.0353	0.78125	.0045
Herz, 1918 and Herz and Kuhn, 1908			
%	η	%	η
25°			
0	1092	88.6	1745
8.1	1128	91.2	1772
17.85	1181	95.2	1835
56.6	1423	100	1915
Parks and Schwencke, 1924			
%	mol%	η	%
25°			
0	0	1090	62.51
12.50	9.8	1164	75.00
25.07	20.4	1233	87.46
37.60	31.6	1319	100
49.98	43.4	1408	

Longinov and Prjanischnikov, 1931			
%	n_D	%	n_D
20°			
0	1.3632	60.5	1.3767
20	.3678	80.4	.3813
40.3	.3723	100	.3859
Parks and Schwencke, 1924			
%	mol %	n_D	
25°			
0	0	1.3590	
12.50	9.8	1.3619	
25.07	20.4	1.3649	
37.60	31.6	1.3681	
49.98	43.4	1.3712	
62.51	56.1	1.3742	
75.00	69.7	1.3772	
87.46	84.2	1.3803	
100	100	1.3883	
Q mix			
25°			
0	0	-	
12.50	9.8	-1.7	
25.07	20.4	-2.8	
37.60	31.6	-4.0	
49.98	43.4	-4.8	
62.51	56.1	-4.8	
75.00	69.7	-4.3	
87.46	84.2	-3.1	
100	100	-	
Hirobe, 1925			
mol%	Q mix.		
25.10°			
19.70	-5.1		
39.69	-6.5		
64.59	-5.6		

Ethyl alcohol (C_2H_6O) + Isopropyl alcohol
(C_3H_8O)

Parks and Kelley, 1925

%	mol%	p	%	mol%	p
25°					
0	0	59.0	50.17	43.5	52.6
15.95	12.7	57.2	66.33	60.2	49.7
16.81	13.4	57.2	66.51	60.4	49.5
33.26	27.6	54.9	83.05	79.0	47.6
32.95	27.4	55.3	82.28	78.1	47.5
50.08	43.5	52.4	100	100	44.4
%			%		
L	V		L	V	

25°

0	0	66.40	58.2
16.39	12.5	82.77	78.5
33.11	26.2	100	100
50.13	40.7		

Ballard and van Winkle, 1952

b. t.	mol%		b. t.	mol%	
	L	V		L	V
78.8	8.50	7.05	81.4	54.30	73.35
79.1	16.65	14.55	81.9	54.45	85.90
79.4	17.05	23.00	80.2	65.20	40.30
79.9	25.75	35.40	80.6	75.75	50.45
80.2	38.65	41.05	79.1	76.00	14.20
80.6	44.10	51.50	81.4	87.60	72.70
81.0	44.80	61.55	82.3	100.00	100.00

Parks and Kelley, 1925

%	d	Q mix.	%	d	Q mix.
25°					
0	0.7857	-	50.17	0.7840	52.6
15.95	.7852	+7.3	66.33	.7833	49.7
16.81	.7851	7.2	66.51	.7834	49.5
33.26	.7845	10.2	83.05	.7829	47.6
32.95	.7841	10.0	82.28	.7829	47.5
50.08	.7839	12.7	100	.7820	44.4

Ethyl alcohol (C_2H_6O) + Butyl alcohol ($C_4H_{10}O$)

Brunjes and Bogart, 1943

%	b. t.		%	b. t.	
L	V		L	V	
760 mm					
9.7	0.4	79.1	63.1	25.0	90.6
17.0	2.0	80.3	68.3	30.7	93.5
22.8	3.1	81.0	77.1	39.7	96.4
35.7	8.6	83.9	82.7	51.9	101.3
36.2	4.0	83.1	88.0	62.0	105.9
44.5	11.4	85.7	92.7	77.7	111.1
51.6	15.1	86.4	96.0	87.8	114.3
54.3	17.3	88.3	100.0	100.0	117.8
56.3	17.9	89.1			(759.4 mm)

Hellwig and van Winkle, 1953

%	mol%		b. t.	
L	V	L	V	
760 mm				
0	0	0	0	78.4
18.1	5	12.0	3.2	80.7
39.8	13.5	29.1	8.8	84.8
50.7	19.3	39.0	12.9	87.7
64.7	30.5	53.2	21.4	92.4
66.0	31.3	54.7	22.1	92.9
-	-	64.3	30.4	95.8
80.4	49.3	71.8	39.8	99.6
84.1	55.5	76.7	43.7	102.1
91.55	72.1	87.1	61.6	107.7
100	100	100	100	117.1

Brunjes and Bogart, 1943

%	n_D	%	n_D
25°			
100	1.3970	56.94	1.3800
94.04	.3940	48.09	.3770
90.40	.3930	37.55	.3731
89.86	.3929	30.39	.3694
84.49	.3909	19.71	.3660
76.81	.3875	11.22	.3626
70.43	.3853	0.0	.3589
64.94	.3830		

Ethyl alcohol (C_2H_6O) + Isobutyl alcohol
($C_4H_{10}O$)

Udovenko and Frid, 1948

mol% L	mol% V			
	50°	60°	70°	80°
100	100	100	100	100
90	66.0	67.5	68.7	70.1
80	46.8	48.7	50.1	51.9
70	34.8	36.5	37.7	39.2
60	26.2	27.6	28.7	30.1
50	19.6	20.8	21.3	23.0
40	14.3	15.4	16.1	17.0
30	10.1	10.7	11.3	12.0
20	6.3	6.8	7.1	7.6
10	3.1	3.3	3.5	3.7
0	0	0	0	0

mol%	p			
	50°	60°	70°	80°
100	56.0	96.0	157.0	249.8
90	76.7	128.4	206.4	321.9
80	96.2	158.5	251.8	386.8
70	115.1	187.7	297.3	453.6
60	132.4	214.8	337.7	513.2
50	148.3	240.5	377.8	566.8
40	164.6	265.4	414.4	620.0
30	180.4	288.7	449.4	671.9
20	194.6	310.5	482.0	721.4
10	208.8	332.8	516.1	769.2
0	222.0	353.3	548.0	813.0

mol%	P ₁	P ₂	mol%	P ₁	P ₂
60°					
90	41.8	86.6	40	224.7	40.7
80	81.3	77.2	30	257.7	31.0
70	119.2	68.5	20	289.4	21.1
60	155.5	59.3	10	321.8	11.0
50	190.4	50.1			

Doroshevski, 1911

%	d	n _D	%	d	n _D
15°					
0.00	0.79367	1.36330	59.09	0.80022	1.38312
6.30	.79435	.36542	68.54	.80142	.38644
12.34	.79488	.36724	89.80	.80430	-
29.06	.79670	.37295	100	.80567	.39750
49.49	.79905	.37995			

Hirobe, 1925

mol%	d	Q mix.
	25°	
0	0.7854	-
22.52	.7891	-11.1
40.86	.7916	-15.3
64.81	.7942	-11.9
100	.7981	-

Ethyl alcohol (C_2H_6O) + sec. Butyl alcohol
($C_4H_{10}O$)

Hellwig and van Winkle, 1953

%		mol%		b. t.
L	V	L	V	
760 mm				
0	0	0	0	78.4
11.7	5.4	7.6	3.4	78.9
25.5	13.5	17.5	8.8	80.8
26.5	13.9	18.3	10.0	81.0
34.6	19.4	24.7	13.0	82.1
54.8	35.8	43.0	25.7	85.5
67.0	48.3	55.8	36.4	87.9
77.3	61.2	67.9	49.5	90.7
96.5	91.8	94.48	87.4	97.5
100	100	100	100	99.3

Ethyl alcohol (C_2H_6O) + Amyl alcohol ($C_5H_{12}O$)

Hellwig and van Winkle, 1953

%		mol%		b. t.
L	V	L	V	
760 mm				
0	0	0	0	78.4
14.7	2.2	8.3	1.2	80.3
28.7	4.7	17.4	2.2	82.3
59.3	14.9	43.2	8.4	90.6
73.4	24.9	59.0	14.8	97.6
79.9	32.8	67.5	20.3	101.8
80.0	32.7	67.6	20.2	102.6
89.5	51.4	81.7	35.6	112.3
93.82	65.8	88.8	50.1	119.5
98.50	86.9	97.17	77.6	130.2
99.20	93.05	98.48	87.5	132.4
100	100	100	100	137.5

Hirata, 1908

%	η (alcohol=1)	
	25°	
25	1.2401	
12.5	.1074	
6.25	.0508	
3.125	.0258	
1.5625	.0127	

Ethyl alcohol (C ₂ H ₆ O) + Isoamyl alcohol (C ₅ H ₁₂ O) Udovenko and Frid, 1948				
mol%(L)		mol%(V)		
	50°	60°	70°	80°
100	100	100	100	100
90	37.2	40.6	44.0	47.4
80	21.6	23.9	26.8	29.3
70	14.2	16.0	18.2	20.1
60	10.0	11.3	12.8	14.4
50	7.1	8.0	9.2	9.4
40	5.0	5.7	6.6	7.4
30	3.4	3.0	4.5	5.1
20	2.1	2.4	2.8	3.1
10	1.0	1.1	1.3	1.5
0	0	0	0	0

mol%		p		
	50°	60°	70°	80°
100	17.5	32.0	57.5	97.0
90	42.5	71.2	117.9	185.0
80	65.4	107.8	172.8	267.3
70	87.8	142.9	226.5	346.1
60	109.3	176.8	278.5	421.1
50	129.9	208.1	327.5	488.6
40	148.7	239.2	374.1	557.6
30	168.1	269.1	420.0	625.2
20	186.8	297.4	463.5	689.6
10	204.2	326.1	506.7	751.7
0	222.0	353.3	548.0	813.0

mol%		p ₁		p ₂	
		60°			
90	42.3	28.9	40	225.5	13.7
80	82.0	25.8	30	258.7	10.4
70	120.0	22.9	20	290.3	7.1
60	156.9	19.9	10	322.4	3.7
50	191.3	16.8			

Brun, 1931			
%	b. t.	%	b. t.
760 mm			
100.00	78.80	42.00	87.20
86.55	80.30	95.45	89.75
80.70	81.75	29.05	95.10
74.25	82.50	21.78	99.80
59.95	84.95	11.67	113.50
50.05	86.90	0.00	129.50

Öholm, 1913		
normality	diffusion ratio (cm ² /day)	
20°		
6		0.45
4		.62
2		.64
1		.66

Landolt, 1865		
%	t	d
100	23.0	0.8085
81.3	22.0	.8055
35.9	21	.7968
9.25	22	.7983
0	21	.7901

Muchin, 1913			
g/100 cc	d	g/100 cc	d
18.4°			
0.0000	0.7963	2.9440	0.8040
0.3170	.8022	4.4160	.8048
0.7350	.8030	6.3415	.8050
0.8832	.8033	14.7200	.8065
1.2684	.8036	22.0800	.8075

Hirobe, 1925	
mol%	d
25.11°	
0	0.7859
16.98	.7917
36.23	.7952
65.60	.7967
100	.8073

Muchin, 1913			
g/100 cc	η	g/100 cc	η
18.4°			
0.0000	1335	2.9440	1397
.3170	1341.8	4.4160	1410
.7350	1342.1	6.3415	1435
.8832	1355.8	14.7200	1570
1.2684	1364	22.0800	1712
Öholm, 1913			
Normality	η (water=1)		
100	20°	4.40	
4		1.814	
2		.502	
1		.332	
0.5		.29	
0		.21	
Landolt, 1865			
%	$(\alpha)_D$		
20°			
100		1.4076	
81.3		.3986	
35.9		.3766	
9.25		.3666	
0		.3620	
Hirobe, 1925			
mol%	Q mix.		
25.11°			
16.98		-13.8	
36.23		-16.1	
65.60		-13.6	

Ethyl alcohol (C ₂ H ₆ O) + Cetyl alcohol (C ₁₆ H ₃₄ O)							
Innes, 1918							
wt%	mol%	p	wt%	mol%	p		
73°							
0	0	619.0	34.8	9.26	576.7		
12.1	2.54	505.1	46.7	14.3	557.6		
24.5	5.82	591.0	56.0	19.5	534.7		
Timofeev, 1894							
%		f. t.					
50.5		23.9					
80.4		37.0					
100		50.8					
Ethyl alcohol (C ₂ H ₆ O) + Octadecyl alcohol (C ₁₈ H ₃₈ O)							
Hoerr, Harwood and Ralston, 1944							
%		f. t.					
0.2		0.0					
4.8		20.0					
18.2		30.0					
54.6		40.0					
100		57.98					
Ethyl alcohol (C ₂ H ₆ O) + Propyl mercaptan (C ₃ H ₈ S)							
Lecat, 1949							
%		b. t.					
0		78.3					
81		63.5 Az					
100		67.3					
Ethyl alcohol (C ₂ H ₆ O) + Ethyl mercaptan(C ₂ H ₆ S)							
Dunstan, 1908							
%		η		%		η	
25°							
0		1113		32.54		652.5	
3.48		1048		35.97		611.9	
9.47		973.1		44.76		582.1	
12.30		930.5		68.05		408.3	
13.88		855.9		100		209.1	
16.25		838.5					

Ethyl alcohol (C ₂ H ₆ O) + Glycerol (C ₃ H ₈ O ₃)			
Dulitskaya, 1945			
mol%	p		
	25°	50°	75°
0.00	59.0	220.0	668.0
16.77	52.0	194.8	584.0
35.42	47.5	174.5	516.5
50.70	42.5	158.0	461.5
67.86	33.0	129.0	375.0

Gerlach, 1889			
%	d	%	d
15°			
0	0.79721	45	0.96479
9	.82601	99	1.20185
18	.85717	100	1.26419

Ernst, Watkins and Ruwe, 1936			
%	d	%	d
25°			
0	0.7851	60	1.0288
10	.8199	70	.0797
20	.8566	80	.1366
30	.8947	90	.1932
40	.9368	100	
50	.9806		

Hirata, 1908	
vol%	η (alcohol=1)
25°	
0.78125	1.0492
1.5625	.0814
3.125	.1746
6.25	.3958
12.5	.9600
25	4.1224

Schmidt and Jones, 1909				
%	η		τ	
	25°	35°		
0	1110	906.8		
25	4367	3188		
50	20530	13230		
75	108420	59710		
100	633000	294030		

Guy and Jones, 1911				
%	η	σ	n _D	U
25°				
0	1068	868.3	729.2	0.0227
25	4184	3061	2303	.0371
50	21230	13510	8723	.0600
75	102900	54040	31110	.0912
100	606700	276100	135200	.124

Ernst, Watkins and Ruwe, 1936				
%	η	σ	n _D	U
25°				
0	1100	22.0	1.3596	0.537
10	1520	22.9	.3701	.550
20	2230	23.9	.3799	.550
30	3490	24.2	.3898	.549
40	5830	25.4	.4005	.548
50	10400	26.1	.4109	.550
60	20600	27.7	.4226	.549
70	45300	29.6	.4344	.549
80	103300	32.7	.4470	.551
90	254000	38.9	.4597	.552
100	934000	62.5	.4729	.555

Helmreich, 1904			
%	U	%	U
0-50°			
0	0.57428	60	0.62535 ?
10	.59176	70	.62579
20	.60477	80	.62199
30	.61824	90	.61738
40	.62502	100	.61230
50	.62587		

Ethyl alcohol (C_2H_6O) + Rhamnose hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f.t.	mol%	f.t.
7.93	42.0	26.1	59.2
12.6	49.3	27.5	59.8
17.2	53.6	27.9	59.9
18.7	54.5	30.7	61.1
21.5	56.1		

Ethyl alcohol (C_2H_6O) + 2-Ethoxyethyl alcohol
($C_4H_{10}O_2$)

Baker, Hubbard and al., 1939

mol%		mol%	
L	V	L	V
at b.t.			
2.6	0.1	50.6	11.5
5.1	0.7	56.9	15.2
7.9	1.1	64.1	19.6
11.4	1.5	71.2	22.4
15.0	2.3	74.2	27.2
19.2	3.5	79.4	32.3
22.6	3.9	83.6	42.2
26.1	4.9	84.4	42.3
31.5	5.7	89.2	58.4
36.5	6.9	92.5	67.9
43.9	9.3	95.7	77.6

mol%	n_D	mol%	n_D
30°			
100	1.4034	30	1.3799
95	.4012	25	.3773
90	.4012	20	.3744
85	.4000	18	.3732
80	.3987	16	.3718
75	.3973	14	.3705
70	.3958	12	.3692
65	.3943	10	.3677
60	.3926	8	.3662
55	.3908	6	.3648
50	.3889	4	.3632
45	.3869	2	.3615
40	.3847	0	.3599
35	.3824		

Ethyl alcohol (C_2H_6O) + Monoacetin ($C_5H_{10}O_4$)

Ohlrm, 1913

normality	Diffusion ratio (cm^2/day)	η
20°		
4	0.33	4114
2	.40	2496
1	.44	1696
0.5	.46	1420
0.25	.47	1315
0	-	1216

Ethyl alcohol (C_2H_6O) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
50.399	-7.04	-7.64	-8.53	-9.62	-11.61	-13.19
25.1995	-7.50	-9.01	-10.64	-12.54	-13.73	-
12.5998	-7.54	-9.13	-10.71	-12.78	-13.89	-
4.885	-7.98	-9.83	-10.85	-11.87	-12.49	-12.90
2.578	-8.15	-10.09	-10.47	-11.25	-12.02	-

Ethyl alcohol (C_2H_6O) + Ethyl tartrate ($C_8H_{14}O_6$)

Landolt, 1877

%	d	$(\alpha)_D$
20°		
0	0.7957	-
22.3297	.86337	9.846
35.7366	.90892	9.618
77.9774	1.08373	8.780
100	.1989	8.309

Patterson, 1901			
t	d	t	d
0 %			
17.6	0.7932	41.6	0.7723
30.4	.7822	58.2	.7575
5.0013 %			
16	0.8097	38	0.7900
20.5	.8056	54.4	.7754
30.6	.7969		
10.94 %			
17.4	0.8263	65.8	0.7826
38.4	.8079	80.2	.8240
55.8	.7922		
20.003 %			
13.1	0.8595	35.2	0.8397
15.6	.8577	39	.8362
18.9	.8544	46.4	.8294
33	.8418	69	.8074
40.002 %			
16.7	0.9272	43.8	0.9017
19	.9258	62.8	.8833
33.3	.9114		
60.01 %			
17.5	1.0079	47.8	0.9780
28.9	0.9969	59.1	.9668
t	(α) _D	t	(α) _D
5.0013 %			
11	7.75	23	9.08
13.7	8.03	30.3	9.73
15.9	8.33	31.1	9.83
17	8.47	37.2	10.49
18.8	8.79	51.8	11.81
10.94 %			
6.6	6.95	23.6	9.03
7.1	6.98	52.8	11.69
18.6	8.37	59.1	12.22
20.003 %			
8.7	6.87	45.6	10.99
9.5	7.14	54	11.71
16.2	7.82	59.7	12.14
23.6	8.85	64.4	12.53
37.9	10.28		
40.002 %			
10.2	6.72	40.1	10.03
12.4	7.02	44.9	10.42
19.7	7.87	51.2	11.01
25	8.48	55	11.31
36.7	9.69	60.3	11.69
60.01 %			
11.1	6.55	34	9.06
14	6.82	39	9.56
21.3	7.75	48.2	10.44
22	7.86	56.7	11.24
For 100 %, see : Methyl alcohol + Ethyl tartrate .			
Ethyl alcohol (C ₂ H ₆ O) + Chloral hydrate (C ₂ H ₅ O ₂ Cl ₃)			
Speyers, 1902			
mol %	f. t.	mol %	f. t.
0.0	34.35	36.0	83.16
13.5	41.08	43.4	92.32

t	d	t	d
0.0	1.110	33.5	1.560
16.7	1.319	40.8	1.589
sat. sol.			
Rudolfi, 1901			
%	20°	44°	%
0.0	0.79101	0.77003	20
0.5	.79325	.77236	40
5	.81192	.79313	60
10	.84438	.82273	80
			100
			-
			.62610
%	H _a	n	H _b
		D	
		20°	
0.0	1.36029	1.36207	1.36636
0.5	.36063	.36228	.36670
5	.36410	.36626	.37058
10	.36886	.37071	.37510
20	.37907	.38098	.38552
40	.40117	.40324	.40818
60	.42904	.43134	.43674
80	.46379	.46627	.47251
		44°	
0.0	1.35096	1.35263	1.35678
0.5	.35154	.35324	.35736
5	.35553	.35716	.36145
10	.36093	.36267	.36701
20	.36983	.37166	.37610
40	.39210	.39406	.39890
60	.42024	.42240	.42774
80	.45472	.45679	.46303
100	.49089	.49328	.50028
Ethyl alcohol (C ₂ H ₆ O)			
+ Complex Ethyl tartrate + Chloral (C ₉ H ₁₅ O ₇ Cl ₃)			
Jones, 1933			
w. l.	(α)		
	78.75 %	87.59 %	
	20°		
6708	29.39	29.12	
6439	31.80	31.63	
6363	32.76	32.52	
6104	35.58	35.38	
5893	38.34	38.12	
5780	39.91	39.64	
5700	41.08	40.75	
5466	44.75	-	
5461	44.91	44.68	
5218	49.34	49.10	
5209	-	49.34	
5153	50.76	50.30	
5105	-	51.58	
5086	52.02	51.91	
4811	58.65	58.40	
4800	58.83	58.63	
4678	62.13	-	
4602	64.33	64.26	
4358	72.28	72.06	

Ethyl alcohol (C_2H_6O) + Cyclopentanol ($C_5H_{10}O$)

Labruyère-Verhavert, 1951

mol%	f.t.	E	mol%	f.t.	E
0	-114.15	-	68.4	-91.8	-
14.7	-118.1	-	81.2	-74.4	-
31.8	-128.9	-134.6	84.7	-66.7	-
40.7	-134.0	-135.0	95.4	-48.2	-
49.6	-115.7	-135.2	97.1	-26.7	-
58.6	-104.8	-135.1	100	-19.5	-

Ethyl alcohol (C_2H_6O) + Menthol ($C_{10}H_{20}O$)

Wetselaar, 1927

%	d	n_D
15°		
0	0.7940	1.3623
5	.7990	.3669
10	.8040	.3716
15	.8090	.3762
20	.8140	.3808

Castiglione, 1934

%	d	η	%	d	η
20°					
0	0.8373	1687.4	40	0.8594	3174.1
10	.8410	2007.9	50	.8612	4032.6
20	.8466	2231.8	60	.8626	5277.4
30	.8532	2658.0			

Ethyl alcohol (C_2H_6O) + Morpholine (C_4H_9ON)

Wheeler Jr. and Houle, 1954

%	n_D	%	n_D
25°			
100	1.4528	39.8	1.3973
89.1	.4430	29.2	.3872
78.8	.4337	19.9	.3786
70.8	.4267	10.9	.3700
55.3	.4121	0	.3593
46.6	.4040		

Ethyl alcohol (C_2H_6O) + Borneol ($C_{10}H_{18}O$)

Tammann and Hirschberg, 1894

%	d/d°			
	0°	10°	20°	30°
0	1	0.9895	0.9788	0.9680
17.12	1	.9897	.9795	.9688
32.38	1	.9898	.9797	.9695

Peacock, 1914

%	d	n_D	(α) _D
25°			
1.0162	0.7889	1.3613	27.4
2.736	.7921	.3635	25.8
3.586	.7934	.3636	25.6
5.290	.7944	.3659	25.5
7.541	.7998	.3682	25.7
9.967	.8040	.3711	25.9
24.330	.8278	.3872	26.4
35.070	.8466	.3993	26.4

Ethyl alcohol (C_2H_6O) + Tetrahydronaphthol
($C_{10}H_{12}O$)

Weissenberger, Schuster and Mayer, 1924

mol%	η	σ
18°		
40.0	22	
33.3	24	
28.0	27	
25.0	28	
0.0	39.05	
(water = 1)		
18°		
40	16.1	0.580
33.3	7.3	.333
25	5.7	.170

Ethyl alcohol (C_2H_6O) + Lupinine hydrochloride
($C_{10}H_{20}ONCl$)

Sadikov, Otroshchenko and Malikov, 1955

%	f.t.
13.42	0
27.27	20
53.15	78

Propyl alcohol (C_3H_8O) + Isopropyl alcohol
(C_3H_8O)

Ballard and van Winkle, 1952

b. t.			mol%			b. t.			mol%		
V			L			V			L		
760 mm											
97.4	0	0				89.7	57.25	43.55			
96.1	11.00	5.75				88.5	66.00	51.90			
96.0	11.10	6.10				87.0	74.80	63.10			
94.2	23.25	14.55				85.8	82.25	73.05			
92.8	35.10	22.85				85.3	84.95	76.75			
91.4	44.35	30.95				84.1	91.75	85.85			
91.4	45.00	31.25				83.4	95.25	91.00			
90.0	55.45	42.00				82.3	100	100			

Propyl alcohol (C_3H_8O) + Butyl alcohol ($C_4H_{10}O$)

Trew and Watkins, 1933

mol%	d	η	n_D	χ
25°				
0	0.80236	1966.6	1.38343	0.7870
10.09	.80331	2024.1	.38515	.7874
20.00	.80402	2071.6	.38674	.7878
30.13	.80460	2435.5	.38820	.7899
40.26	.80544	2194.5	.38987	.7905
50.09	.80605	2254.0	.39218	.7926
60.55	.80653	2318.9	.39259	.7941
62.79	.80663	2326.1	.39293	.7941
79.83	.80735	2431.6	.39504	.7940
89.92	.80792	2494.1	.39634	.7933
100	.80841	2755.0	.39749	.7916

Propyl alcohol (C_3H_8O) + Isobutyl alcohol
($C_4H_{10}O$)

Udoenko and Frid, 1948

mol%				
L	V	P_1	P_2	P
50°				
88.6	83.0	10.1	49.6	59.7
77.2	67.5	20.7	43.1	63.8
72.1	60.8	25.8	40.0	65.8
65.3	52.0	32.4	35.1	67.5
54.6	42.9	41.0	30.9	71.9
46.8	33.9	49.6	25.4	75.0
35.1	23.7	60.4	18.8	79.2
24.9	16.0	69.2	13.2	82.4
12.2	7.7	80.1	6.7	86.8

60°

88.6	82.9	17.4	84.3	101.7
78.9	70.3	31.9	75.6	107.5
71.1	61.5	43.1	68.9	112.0
65.3	54.8	52.0	63.1	115.1
54.6	41.5	71.2	50.5	121.7
44.4	32.0	86.8	40.9	127.7
35.1	24.3	100.7	32.3	133.0
24.9	16.5	115.1	22.8	137.9
15.1	9.2	130.5	13.2	143.7

70°

88.6	84.1	26.5	140.0	166.5
78.9	70.1	52.6	143.2	175.8
72.1	62.5	68.4	123.2	182.4
62.4	51.9	92.1	114.0	191.4
51.7	41.5	117.0	83.0	200.0
43.9	32.0	141.0	66.0	208.0
32.2	24.3	164.5	52.8	217.3
27.3	19.3	180.0	43.1	223.1
15.1	9.5	211.5	22.2	233.7

80°

88.6	83.5	44.1	220.9	265.0
76.7	67.9	90.2	190.7	280.9
72.6	63.5	104.4	181.6	286.0
64.3	54.1	136.3	160.7	297.0
57.5	46.6	163.8	143.0	306.8
46.8	37.0	201.9	118.6	320.5
32.2	22.2	264.7	75.5	340.2
22.4	16.1	294.3	56.5	350.8
12.2	8.0	336.3	29.2	365.5

Hirobe, 1908

mol%	d
25.14°	
0	0.7998
28.33	.7994
40.57	.7990
67.58	.7988
100	.7981

Longinov and Prjanischnikov, 1931

%	n_D
20°	
0	1.3859
20.2	.3879
39.9	.3898
57.4	.3916
79.9	.3938
100	.3959

Hirobe, 1908

mol%	Q mix.
25.14°	
28.33	-2.2
40.57	-2.0
67.58	-1.2

Propyl alcohol (C ₃ H ₈ O) + Isoamyl alcohol (C ₅ H ₁₂ O)				
Udovenko and Frid, 1948				
mol%		P ₁	P ₂	P
L	V			
50°				
91.2	66.1	8.1	15.9	24.0
81.0	45.9	16.9	14.3	31.2
67.0	27.7	30.4	11.6	42.0
57.5	20.2	39.4	10.0	49.4
50.2	15.6	45.8	8.5	54.3
41.6	12.2	53.5	7.4	60.9
31.0	7.6	62.4	5.1	67.5
22.7	5.3	71.0	4.0	75.0
12.0	2.5	80.2	2.1°	82.3
60°				
91.0	64.3	15.3	27.7	43.0
81.3	47.2	29.1	26.0	55.1
67.0	29.0	51.1	20.9	72.0
57.0	20.9	66.4	17.6	84.0
50.0	20.0	74.9	18.7	93.6
40.4	12.5	90.0	12.9	102.9
27.0	6.4	110.0	7.5	117.5
22.5	5.3	117.6	6.6	124.2
11.8	2.4	135.9	3.3	139.2
70°				
89.0	66.5	22.5	54.5	77.0
79.3	47.2	50.8	45.5	96.3
63.0	28.5	91.7	36.5	128.2
53.0	21.1	115.1	30.8	145.9
48.5	18.6	124.7	28.5	153.2
35.4	11.0	160.2	19.8	180.0
27.0	7.6	180.2	14.9	195.1
21.7	6.1	193.2	12.6	205.8
10.9	2.6	220.1	5.9	226.0
80°				
91.0	69.8	37.2	86.1	123.3
79.2	49.0	79.5	76.5	156.0
64.5	31.1	136.8	61.7	198.5
53.0	20.2	185.0	46.9	231.9
50.0	18.6	196.0	44.8	240.8
43.1	16.0	217.6	41.4	259.0
32.0	10.5	259.7	30.5	290.2
21.8	6.6	298.0	21.1	319.1
10.9	3.4	337.8	11.9	349.7

mol%		Q mix.	
25.08°			
17.96	-1.3		
38.34	-2.0		
57.53	-0.5		

Propyl alcohol (C ₃ H ₈ O) + Butyl mercaptan (C ₄ H ₉ OS)	
Lecat, 1949	
%	b. t.
0	97.2
59	92.0 Az
100	97.5

Propyl alcohol (C ₃ H ₈ O) + Allyl alcohol (C ₃ H ₆ O)	
Wallace and Atkins, 1912	
%	d
0°	
100	0.86900
41.69	.84739
0	.81925

Lecat, 1949		
%	b. t.	Dt mix.
0	97.2	-
26	96.73 Az	-
50	-	-0.5
100	96.85	-

Propyl alcohol (C ₃ H ₈ O) + Glycerol (C ₃ H ₈ O ₃)							
Danusso, 1955							
mol%		d	v	mol%		d	v
30°							
0	0.7966	1193	64.54	1.0979	1572		
13.74	.8616	1252	78.53	.1618	1677		
31.71	.9457	1347	100	.2510	1908		
45.42	1.0095	1423					
v= ultrasound velocity (m/sec.)							

Propyl alcohol (C ₃ H ₈ O) + Methyl malate 1 (C ₆ H ₁₀ O ₅)							15.9	6.36	17.507 %	29.7	8.23
Grossmann and Landau, 1910							19.7	6.93			
g/100 cc (α)									25 %		
	red	yellow	green	pale blue	dark blue	viol.	18.8	6.63		51.9	10.42
							18.9	6.67		57.9	11.01
							33.1	8.37		63.3	11.44
							42.3	9.54		68.2	11.84
20°									37.51 %		
							15.9	6.03		31	7.94
							23.2	6.98		36	8.67
									49.834 %		
49.488	-7.07	-7.44	-8.79	-10.51	-11.42	-11.88	19	6.30		52.4	9.91
24.744	-6.91	-7.48	-8.41	-10.10	-10.79	-	19	6.33		58.2	10.43
12.372	-7.27	-8.16	-9.86	-12.29	-13.09	-	28	7.39		63.6	10.91
5.213	-5.75	-6.71	-7.10	-9.40	-10.36	-10.93	41.2	8.81		71.2	11.56
2.4785	-8.47	-9.68	-10.89	-11.70	-14.12	-			74.99 %		
							17.7	6.35		60.5	10.77
							20	6.54		69.9	11.43
							33.3	8.15		73.6	11.65
							47.1	9.67		79	11.89
Propyl alcohol (C ₃ H ₈ O) + Ethyl tartrate (C ₈ H ₁₄ O ₆)											
Patterson, 1901											
	t	d		t	d						
0 %											
	20	0.8039		40	0.7875						
	23.4	.8012			.7682						
	32	.7942			.7622						
2.5004 %											
	16.6	0.8146		32.5	0.8017						
	20.9	.8111									
4.9996 %											
	16.7	0.8210		58	0.7863						
	33.2	.8075			.7661						
	44.9	.7977			.8193						
7.713 %											
	23.5	0.8236		58.4	0.7941						
	34.2	.8148			.7763						
	45.8	.8050			.8268						
17.507 %											
	18.9	0.8570		28.2	0.8492						
25 %											
	17.7	0.8810		52.1	0.8506						
	19.0	.8802			.8334						
	31.6	.8691									
37.51 %											
	17.8	0.9242		35.6	0.9082						
49.834 %											
	18.6	0.9696		43.8	0.9453						
	19.8	.9678			.9303						
	31.2	.9571			.9099						
74.99 %											
	18	1.0833		38.3	1.0576						
	20.8	.0811			.0448						
	21	.0747			.0248						
	t			t							
2.5004 %											
	16.1	6.79		29	8.58						
	19.4	7.07									
4.9996 %											
	17.6	6.93		45.7	10.36						
	18.4	7.16			11.03						
	20	7.29			11.91						
	28.3	8.49			12.61						
7.713 %											
	13	6.34		28.9	8.52						
	18.5	7.13			9.89						
	18.7	7.16			10.90						
	21.3	7.55			11.55						

For 100 %, see : Methyl alcohol + Ethyl tartrate				
Propyl alcohol (C ₃ H ₈ O) + d-Mannitol (C ₆ H ₁₄ O ₆)				
Upson, Fluevog and Albert, 1935				
mol %		f.t.		
1.93		58.8		
2.36		61.5		
3.28		67.3		
4.74		73.7		
6.31		78.6		
10.8		89.2		
12.2		90.9		
17.4		97.7		
Propyl alcohol (C ₃ H ₈ O) + l-Rhamnose hydrate (C ₆ H ₁₄ O ₆)				
Upson, Fluevog and Albert, 1935				
mol %		f.t.		
2.43		31.0		
3.32		40.0		
3.61		41.3		
4.43		46.1		
6.04		51.2		
8.04		56.5		
10.33		61.1		
12.44		63.2		

15.9	6.36	17.507 %	29.7	8.23
19.7	6.93			
25 %				
18.8	6.63		51.9	10.42
18.9	6.67		57.9	11.01
33.1	8.37		63.3	11.44
42.3	9.54		68.2	11.84
37.51 %				
15.9	6.03		31	7.94
23.2	6.98		36	8.67
49.834 %				
19	6.30		52.4	9.91
19	6.33		58.2	10.43
28	7.39		63.6	10.91
41.2	8.81		71.2	11.56
74.99 %				
17.7	6.35		60.5	10.77
20	6.54		69.9	11.43
33.3	8.15		73.6	11.65
47.1	9.67		79	11.89

For 100 %, see : Methyl alcohol + Ethyl tartrate

Propyl alcohol (C_3H_8O) + d-Mannitol ($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol %	f.t.
1.93	58.8
2.36	61.5
3.28	67.3
4.74	73.7
6.31	78.6
10.8	89.2
12.2	90.9
17.4	97.7

Propyl alcohol (C_3H_8O) + l-Rhamnose hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol %	f.t.
2.43	31.0
3.32	40.0
3.61	41.3
4.43	46.1
6.04	51.2
8.04	56.5
10.33	61.1
12.44	63.2

Isopropyl alcohol (C_3H_8O) + Butyl alcohol
($C_4H_{10}O$)

Trew and Watkins, 1933

mol %	d	η	n_D	χ
25°				
0.00	0.78113	2008.7	1.37538	0.7939
10.26	.78431	2057.1	.37810	.7936
20.12	.78713	2104.8	.38086	.7952
30.20	.79009	2145.2	.38325	.7947
40.45	.79299	2207.4	.38560	.7963
50.86	.79542	2268.6	.38767	.7974
60.02	.79756	2327.4	.38967	.7962
73.40	.80083	2405.7	.39233	.7975
79.60	.80227	2437.1	.39386	.7969
90.21	.80439	2505.9	.39580	.7944
100.00	.80652	2562.8	.39747	.7916

Isopropyl alcohol (C_3H_8O) + Isobutyl alcohol
($C_4H_{10}O$)

Ballard and van Winkle, 1952

mol%		b. t.		mol%		b. t.	
V	L	V	L	V	L	V	L
760 mm							
100	100	108.1					
88.80	95.35	106.2	32.30	55.90	93.7		
74.90	88.45	103.4	24.20	45.45	91.0		
57.30	78.15	99.9	17.55	36.20	88.7		
55.90	76.95	99.4	11.25	25.50	86.9		
41.55	63.45	95.8	7.05	17.25	85.4		
37.10	61.30	94.9	1.95	5.15	83.2		
			0	0	82.3		

Toropov, 1956

mol%	d		
	20°	40°	60°
100	0.8016	0.7862	0.7696
80	.7993	.7834	.7664
60	.7963	.7802	.7627
40	.7929	.7766	.7587
20	.7896	.7728	.7545
0	.7855	.7684	.7497

mol%	η		
	20°	40°	60°
100	4009	2138	1233
80	3536	1923	1220
60	3163	1742	1029
40	2856	1586	940
20	2597	1449	867
0	2385	1334	798

Ishikawa, 1930

%	n_D	%	n_D
30°			
0	1.37355	71.5282	1.38637
31.7103	.37888	100	.39163
51.7932	.38268		

Isopropyl alcohol (C_3H_8O) + Isoamyl alcohol
($C_5H_{12}O$)

Ishikawa, 1930

%	n_D	%	n_D
30°			
0	1.37355	71.8168	1.39534
31.9686	.38296	100	.40405
51.9890	.38913		

Isopropyl alcohol (C_3H_8O) + Decyl alcohol
($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
12.9	-40.0	86.0	0.0
35.5	-20.0	100	+ 6.88

Isopropyl alcohol (C_3H_8O) + Lauryl alcohol
($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
1.5	-40.0	93.0	+20.0
9.1	-20.0	100	+23.95
41.9	0.0		

Isopropyl alcohol (C_3H_8O) + Tetradecyl alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
1.2	-20.0	84.5	+30.0
11.3	0.0	100	+38.26
55.2	+20.0		

Isopropyl alcohol (C_3H_8O) + Cetyl alcohol
($C_{16}H_{34}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
below 0.1	-20.0
3.0	0.0
19.2	+20.0
48.7	+30.0
80.4	+40.4
100	+49.62

Isopropyl alcohol (C_3H_8O) + Octadecyl alcohol
($C_{18}H_{38}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
below 0.1	0.0
7.1	20.0
22.5	30.0
54.3	40.0
100	50.0

Isopropyl alcohol (C_3H_8O) + l-Rhamnose-hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f. t.	mol%	f. t.
3.01	36.8	6.86	53.8
4.06	44.5	7.49	55.3
5.37	49.3	10.70	61.2

Isopropyl alcohol (C_3H_8O) + Glycerol ($C_3H_8O_3$)

Danusso, 1955

mol %	d	v
	30°	
0	0.7772	1125
23.61	.8928	1245
42.06	.9836	1367
60.19	1.0729	1518
74.90	.1431	1682
91.57	.2193	1835
100	.2544	1911

v = ultrasound velocity (m/sec.)

Butyl alcohol ($C_4H_{10}O$) + Isobutyl alcohol
($C_4H_{10}O$)

Toropov, 1956

mol%	d		
	20°	40°	60°
100	0.8016	0.7862	0.7696
80	.8039	.7883	.7717
60	.8056	.7900	.7736
40	.8071	.7915	.7752
20	.8084	.7930	.7767
0	.8096	.7941	.7783

mol%	η		
	20°	40°	60°
100	4009	2138	1233
80	3680	2022	1192
60	3434	1937	1157
40	3243	1872	1147
20	3078	1818	1132
0	2939	1766	1125

Trew and Watkins, 1933

mol%	d	η	n_D	χ
	25°			
100	0.79806	3555.6	1.39387	0.8094
90.18	.79882	3238.5	.39426	.8102
79.93	.79984	3110.6	.39474	.8111
69.90	.80056	3101.5	.39518	.8112
59.54	.80142	2935.4	.39548	.8131
49.74	.80205	2859.0	.39581	.8080
37.39	.80300	2772.4	.39638	.8069
29.76	.80376	2726.2	.39658	.8025
19.99	.80434	2671.9	.39690	.7995
8.22	.80542	2607.6	.39719	.7925
0	.80601	2556.9	.39749	.7900

Butyl alcohol ($C_4H_{10}O$) + sec. Butyl alcohol-d
(C_4H_9O)

Veltmans, 1926

%	d	(α) _D
	20°	
0	0.8097	0
33	.8088	4.83
100	.8069	13.87

Butyl alcohol ($C_4H_{10}O$) + Isoamyl alcohol
($C_5H_{12}O$)

Trew and Watkins, 1933

mol%	d	η	n_D	χ
25°				
100	0.81047	3756.3	1.40781	0.8060
89.77	.81002	3620.0	.40706	.8056
79.60	.80952	3472.2	.40625	.8057
70.23	.80914	3343.2	.40538	.8031
59.74	.80873	3210.5	.40449	.8001
49.95	.80769	3092.8	.40350	.7974
39.54	.80795	2971.9	.40216	.7975
30.04	.80750	2750.7	.40128	.7945
19.85	.80685	2745.7	.40010	.7868
8.28	.80633	2615.2	.39871	.7833
0	.80589	2561.7	.39749	.7776

Butyl alcohol ($C_4H_{10}O$) + Decyl alcohol ($C_{10}H_{22}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
14.8	-40.0
34.7	-20.0
82.6	0.0
100	+6.88

Butyl alcohol ($C_4H_{10}O$) + Lauryl alcohol ($C_{12}H_{26}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
3.5	-40.0
10.2	-20.0
38.7	0.0
90.5	+20.0
100	23.95

Butyl alcohol ($C_4H_{10}O$) + Tetradecyl alcohol
($C_{14}H_{30}O$)

Hoerr, Harwood and Ralston, 1944

%	f. t.
0.2	-40.0
2.3	-20.0
12.3	0.0
51.2	+20.0
78.5	30.0
100	38.26

Butyl alcohol ($C_4H_{10}O$) + Cetyl alcohol ($C_{16}H_{34}O$)

Fischer, 1940

mol%	f. t.	tr. t.	mol%	f. t.
100	49.1	44.0	15.3	17.0
94.1	47.8	44.1	9.6	12.2
85.9	45.7	-	5.9	7.8
58.1	36.6	-		

Hoerr, Harwood and Ralston, 1944

%	f. t.	%	f. t.
0.5	-20.0	43.9	30.0
3.9	0.0	73.3	40.0
19.9	+20.0	100	49.62

Butyl alcohol ($C_4H_{10}O$) + Octadecyl alcohol
($C_{18}H_{38}O$)

Fischer, 1940

mol%	f. t.	tr. t.
100	57.9	-
81.0	54.1	53.4
64.7	49.7	-
41.6	42.0	-

Hoerr, Harwood and Ralston, 1944

%	f. t.
1	0.0
8.4	20.0
21.7	30.0
47.1	40.0
100	57.98

Butyl alcohol ($C_4H_{10}O$) + Glycerol ($C_3H_8O_3$)

Danusso, 1955

mol%	d	v	mol%	d	v
30°					
0	0.8026	1227	60.74	1.0560	1495
23.37	.8937	1294	79.62	.1470	1661
36.07	.9465	1354	88.83	.1935	1779
44.20	.9814	1392	100	.2510	1908

v= ultrasound velocity (m/sec.)

Butyl alcohol (C ₄ H ₁₀ O) + Ethylene chlorhydrin (C ₂ H ₅ OC1)			
Snyder and Gilbert, 1942			
b. t.	mol%	n _D ^{20°}	
	L	V	
128.0	100	100	1.4402
126.0	94.9	92.0	.4373
123.2	82.0	73.4	.4301
120.8	57.0	46.2	.4181
119.5	38.4	29.9	.4103
119.0	32.1	22.2	.4079
118.6	26.3	19.5	.4058
118.3	21.3	15.7	.4041
118.0	15.7	11.4	.4023
117.5	8.0	5.8	.4000
117.2	0	0	.3977

Isobutyl alcohol (C ₄ H ₁₀ O) + Isoamyl alcohol (C ₅ H ₁₂ O)			
Udovenko and Frid, 1948			
mol%	P ₁	P ₂	P
L	V		
50°			
100	100	-	17.5
87.2	69.0	6.9	15.3
78.6	53.9	11.8	13.9
71.6	43.8	15.7	12.2
58.5	31.1	23.2	10.5
51.2	25.0	27.2	9.1
41.5	18.0	32.8	7.2
32.0	12.4	38.7	5.5
19.4	7.0	45.2	3.4
9.0	2.8	51.3	1.5
0	0	56.0	-
60°			
100	100	-	32.0
87.2	69.6	12.1	27.9
78.6	55.9	19.9	25.3
71.5	45.7	27.4	23.0
58.7	33.4	38.8	19.4
51.2	28.9	44.8	18.2
41.0	18.0	57.4	12.6
32.0	13.7	65.0	10.3
18.5	7.0	77.9	6.1
8.5	3.4	87.3	3.1
0	0	96.0	-
70°			
100	100	-	57.5
87.2	71.7	20.0	50.7
78.6	60.7	30.3	46.7
71.4	47.0	46.0	40.7
58.7	34.2	64.5	33.5
49.6	26.2	78.6	27.9
41.5	20.3	93.0	23.7
31.0	14.9	107.5	18.8
18.5	7.0	129.0	9.7
8.0	2.6	145.0	3.8
0	0	157.0	-

80°			
100	100	-	97.0
87.2	71.6	32.3	83.7
75.8	54.1	61.4	72.4
67.7	44.5	81.6	65.4
58.7	35.0	104.1	56.1
50.1	28.2	125.0	49.1
41.5	21.4	146.0	39.8
30.0	13.7	176.4	28.1
16.7	7.0	207.9	15.6
8.0	2.6	230.4	6.6
0	0	249.8	-

Toropov, 1956			
mol%	d		
	20°	40°	60°
0	0.8016	0.7862	0.7696
20	.8038	.7885	.7721
40	.8056	.7904	.7742
60	.8070	.7919	.7759
80	.8080	.7931	.7772
100	.8086	.7938	.7781

Hirobe, 1908			
%	d		
	25.05°		
0		0.7981	
24.80		.8008	
47.49		.8030	
66.51		.8049	
100		.8073	

Toropov, 1956			
mol%	η		
	20°	40°	60°
0	4009	2138	1233
20	4048	2173	1268
40	4099	2220	1305
60	4163	2270	1343
80	4241	2326	1382
100	4366	2392	1423

Longinov and Prjanishnikov, 1931			
%	n _D	%	n _D
20°			
0	1.3959	60.4	1.4027
20.2	.3981	80.2	.4051
40.3	.4005	100	.4072

Ishikawa, 1930

%	n_D	%	n_D
30°			
0.0000	1.39163	1.4000	1.39902
19.5112	.39408	100.0000	.40405
41.6097	.39665		

Hirobe, 1908

%	Q mix.
25.05°	
24.80	-3.6
47.49	-1.4
66.51	-1.1

Isobutyl alcohol ($C_4H_{10}O$) + Glycerol ($C_3H_8O_3$)

Danusso, 1955

mol %	d	v
30°		
0	0.7949	1178
25.05	0.8952	1264
46.34	0.9879	1363
68.00	1.0920	1532
81.23	1.1603	1690
87.11	1.1877	1719
100	1.2544	1911
v = ultrasound velocity (m/sec.)		

Silbereisen, 1929

t	σ interface L_1/L_2
1	0.76
5	0.444
13	0.190
10	0.038

Isobutyl alcohol ($C_4H_{10}O$) + d-Mannitol ($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f.t.	mol%	f.t.
1.10	57.5	3.00	73.6
1.49	61.3	5.38	83.3
1.95	67.4	7.54	89.5
2.69	72.1	16.36	101.8

Isobutyl alcohol ($C_4H_{10}O$) + l-Rhamnose-hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f.t.	mol%	f.t.
2.18	40.4	4.51	55.0
2.85	44.4	6.17	61.2
3.78	51.4	7.83	66.6

Isobutyl alcohol ($C_4H_{10}O$) + Methyl malate 1
($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc		(α)					
		red	yellow	green	pale blue	dark blue	viol.
20°							
50.238	-5.57	-6.67	-7.66	-8.76	-10.05	-10.41	
25.129	-6.29	-7.20	-8.48	-9.91	-10.86	-	
12.5645	-5.89	-7.08	-8.28	-9.63	-10.90	-	
5.019	-2.99	-3.19	-3.39	-3.59	-3.19	-2.79	
2.538	-1.97	-2.76	-2.76	-2.36	-1.97	-	

Isobutyl alcohol (C₄H₁₀O) + Ethyl tartrate
(C₈H₁₄O₆)

Patterson, 1901

t	d	t	d		
			0 %		
6.9	0.8053	69.6	0.7615		
41.0	.7861	83.7	.7482		
53.2	.7759				
			5 %		
18.5	0.8179	48	0.7937		
19.9	.8165	63.8	.7798		
31	.8076				
			9.996 %		
15.9	0.8343	65.6	0.7925		
19.7	.8311	81.8	.7774		
30.8	.8223	83.4	.7762		
47.0	.8087				
			25 %		
14.7	0.8812	43.6	0.8557		
14.8	.8806	59.0	.8423		
26.6	.8704	77.2	.8252		
			50.005 %		
16	0.9683	52.5	0.9345		
20	.9656	67.5	.9203		
38.2	.9480	77.6	.9104		
			62.84 %		
17.4	1.0198	65	0.9741		
33.9	.0044	82.8	.9563		
47.3	0.9916				
			75.03 %		
18.4	1.0738	44.3	1.0486		
19.8	.0739	58.3	.0347		
27.5	.0650	78.8	.0142		
t	(α) _D	t	(α) _D	t	(α) _D
			5 %		
13.3	5.11	27.3	7.21	53.9	9.95
13.5	5.04	44.0	8.91	63.9	11.02
25.6	6.97				
			9.996 %		
16.1	5.11	27.4	6.81	61.2	10.44
16.9	5.26	41.1	8.46	69.2	11.12
20.5	5.72	50.2	9.44	76.5	11.58
			25 %		
13.2	4.28	26.0	6.11	63.2	10.36
14.9	4.52	39.0	7.75	65.6	10.59
18.1	5.01	48.9	8.86	73.2	11.20
18.7	5.13	56.9	9.70	78.2	11.62
			50.005 %		
12.7	4.05	43.3	8.09	70.2	10.32
18.0	4.80	52.2	8.82	78.4	11.08
36.6	5.98	61.6	9.66		
			62.84 %		
12	4.28	39.8	7.82	72.2	10.75
18	4.99	52.5	9.08	78.8	11.28
20	5.29	62	9.95	82.3	11.51
27.7	6.35				
			75.03 %		
13.3	4.72	29.1	6.79	62.5	10.11
15.7	5.03	43.2	8.49	74.9	11.07
17.9	5.29	54.5	9.41		

For 100 %, see : Methyl alcohol + Ethyl tartrate .

Winther, 1903

t	d			
	100%	80.97%	62.56%	
20	1.2025	1.1021	1.0172	
30	.1929	.0924	1.0089	
40	.1832	.0828	0.9996	
50	.1731	.0733	0.9907	
60	.1636	.0637	0.9812	
	41.24%	21.61%	13.82%	
20	0.9338	0.8682	0.8446	
30	.9252	.8601	.8367	
40	.9169	.8522	.8288	
50	.9079	.8437	.8209	
60	.8985	.8350	.8123	
t	red	yellow	(α) green	pale blue dark blue
			100%	
20	6.73	7.38	7.24	4.39 2.71
30	7.48	8.38	8.51	6.28 4.80
40	8.17	9.28	9.66	7.99 6.72
50	8.80	10.09	10.69	9.53 8.46
60	9.36	10.80	11.61	10.90 10.01
			80.97%	
20	5.50	5.78	5.30	1.70 -0.29
30	6.36	6.93	6.75	3.81 +2.08
40	7.17	7.97	8.07	5.77 4.29
50	7.92	8.91	9.27	7.57 6.34
60	8.61	9.76	10.35	9.22 8.23
			62.56%	
20	5.09	5.18	4.54	0.68 -1.38
30	6.00	6.38	6.03	2.96 +1.11
40	6.84	7.48	7.48	5.50 3.40
50	7.62	8.47	8.79	6.94 5.50
60	8.34	9.36	9.98	8.64 7.41
			41.24%	
20	4.54	4.93	4.23	0.23 -1.69
30	5.72	6.90	5.99	2.74 +1.18
40	6.66	7.48	7.51	4.97 3.68
50	7.47	8.48	8.79	6.91 5.81
60	8.14	9.30	9.84	8.97 7.58
			21.61%	
20	5.11	5.31	4.74	1.12 -1.01
30	6.14	6.64	6.40	3.40 +1.70
40	7.11	7.82	7.83	5.59 4.18
50	8.02	8.86	9.03	7.69 6.42
60	8.86	9.76	9.99	9.69 8.42
			13.82%	
20	4.97	5.42	4.70	1.46 -1.02
30	6.04	6.70	6.15	3.88 +1.81
40	6.98	7.87	7.59	6.02 4.29
50	7.79	8.93	9.00	7.87 6.42
60	8.46	9.88	10.40	9.44 8.20

Isobutyl alcohol ($C_4H_{10}O$) + Propyl tartrate
($C_5H_8O_6$)

Winther, 1903

t	d		
	100%	78.79%	58.76%
20	1.1389	1.0492	0.9750
30	.1306	.0401	.9665
40	.1212	.0310	.9579
50	.1120	.0219	.9490
60	.1027	.0127	.9398
	40.85%	23.16%	15.31%
20	0.9172	0.8645	0.8449
30	.9099	.8566	.8369
40	.9014	.8486	.8291
50	.8925	.8402	.8210
60	.8835	.8317	.8125

t	(α)				
	red	yellow	green	pale blue	dark blue
	100%				
20	10.17	11.81	12.98	12.77	11.98
30	10.89	12.74	14.14	14.46	13.86
40	11.54	13.57	15.20	16.02	15.59
50	12.12	14.31	16.15	17.44	17.16
60	12.63	14.96	17.00	18.72	18.58
	78.79%				
20	9.47	10.87	11.90	11.30	10.38
30	10.22	11.85	13.21	13.16	12.48
40	10.91	12.74	14.35	14.83	14.35
50	11.54	13.54	15.33	16.31	15.98
60	12.10	14.24	16.14	17.61	17.37
	58.76%				
20	9.30	10.68	11.67	11.03	10.21
30	10.06	11.66	12.95	12.92	12.29
40	10.75	12.56	14.11	14.64	14.10
50	11.38	13.39	15.15	16.20	15.91
60	11.94	14.15	16.60	17.60	17.46
	40.85%				
20	9.31	10.75	11.76	11.36	10.48
30	10.09	11.75	13.12	13.21	12.62
40	10.78	12.63	14.29	14.91	14.53
50	11.40	13.40	15.28	16.46	16.22
60	11.93	14.06	16.08	17.85	17.68
	23.16%				
20	9.59	10.94	12.09	11.64	10.94
30	10.43	11.91	13.25	13.61	12.88
40	11.14	12.82	14.35	15.37	14.76
50	11.73	13.66	15.40	16.92	16.59
60	12.19	14.42	15.39	18.26	18.36
	15.31%				
20	9.43	10.90	12.13	11.59	11.51
30	10.00	11.69	13.26	13.55	13.66
40	10.55	12.44	14.33	15.28	15.44
50	11.07	13.15	15.34	16.79	16.86
60	11.56	13.81	16.30	18.07	17.91

Isobutyl alcohol ($C_4H_{10}O$) + Ethylene chlorhydrin
(C_2H_5OCl)

Snyder and Gilbert, 1942

b. t.	mol%		$n_D^{25^\circ}$
	L	V	
128.0	100	100	1.4402
125.7	97.0	93.1	.4385
119.6	84.7	69.5	.4313
116.5	73.6	57.6	.4251
113.3	55.8	39.5	.4161
112.2	47.6	32.4	.4123
111.0	37.6	24.1	.4080
110.2	31.8	19.8	.4056
109.8	27.5	16.8	.4039
109.3	22.3	13.5	.4019
108.3	11.4	6.0	.3981
107.5	0	0	.3942

Sec. Butyl alcohol ($C_4H_{10}O$) + d-Mannitol ($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%		f. t.	
1.625	53.5	4.32	73.0
2.27	60.3	7.72	83.3
3.86	66.1	19.04	100.0
3.56	69.5		

Tert. Butyl alcohol ($C_4H_{10}O$) + l-Rhamnose hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%		f. t.
3.97		42.4
5.99		53.2
7.10		57.1
8.72		62.3
11.40		67.4

Amyl alcohol ($C_5H_{12}O$) + Glycerol ($C_3H_8O_3$)

Poppe, 1934

C.S.T. = 61.1° dt/dp = -0.0194

Amyl alcohol ($C_5H_{12}O$) + Methyl lactate ($C_4H_8O_3$)

Lecat, 1949

%	b. t.
0	138.2
-	138.0 Az
100	143.8

Isoamyl alcohol ($C_5H_{12}O$) + 2-Methyl butyl alcohol ($C_5H_{12}O$)

Hafslund and Lovell, 1946

mol%		mol%	
L	V	L	V
91.82	91.27	48.56	46.72
90.24	89.72	44.60	42.42
86.36	85.31	42.59	40.59
83.42	82.59	38.62	36.61
78.75	77.52	32.37	30.61
72.60	70.88	25.12	23.71
68.57	66.69	21.71	19.80
65.17	63.57	15.51	14.68
62.85	61.05	12.05	11.38
57.63	55.57	6.25	5.74
52.12	50.37	1.42	1.33

Ocon, Espatoso and Maso, 1956

mol%		mol%	
L	V	L	V
95.83	95.51	131.5	57.82
95.80	95.46	131.6	55.62
90.89	90.20	131.1	53.29
90.78	90.07	131.0	52.12
89.04	89.17	131.0	49.21
87.72	86.92	130.9	49.04
83.92	82.86	130.6	44.12
82.61	81.27	130.5	42.54
80.17	78.87	130.3	38.16
78.66	77.17	130.2	38.05
77.00	75.58	130.1	36.08
74.76	73.39	130.0	35.90
73.97	72.43	129.8	35.32
71.04	69.28	129.7	33.53
69.54	67.74	129.8	31.00
64.97	63.03	129.6	30.33
62.78	60.74	129.4	25.22
60.71	58.62	129.5	24.60
57.86	55.81	129.4	17.06

Hafslund and Lovell, 1946

mol%	d	mol%	d
35°			
100	0.8028	32.48	0.8056
85.44	.8035	16.10	.8068
69.15	.8043	0.66	.8074

Ikeda, Kepner and Webb, 1956

%	d	n _D	(α) _D
25°			
0	0.8150	1.4088	-5.25
9.96	.8145	.4080	-4.30
20.02	.8139	.4075	-3.85
29.86	.8125	.4073	-3.40
39.96	.8115	.4070	-2.94
49.96	.8105	.4066	-2.43
59.98	.8096	.4062	-1.98
69.56	.8085	.4058	-1.50
79.95	.8073	.4053	-0.98
89.84	.8063	.4050	-0.50
100	.8056	.4046	0

Hafslund and Lovell, 1946

mol%	(α) ₅₈₅₀	mol%	(α) ₅₈₅₀
35°			
99.34	-5.6936	28.50	-5.7979
84.09	-5.7061	19.95	-5.8077
61.92	-5.7483	8.72	-5.8857
42.81	-5.7870	7.57	-5.7689

Isoamyl alcohol ($C_5H_{12}O$) + Glycerol ($C_3H_8O_3$)

Mc Ewen, 1923

%	sat. t.	%	sat. t.
15.74	12.5	68.10	74.2
23.79	36.8	72.38	73.7
37.60	61.4	80.80	71.5
45.59	69.3	86.03	71.5
53.84	73.0	86.03	66.5
63.21	74.1	94.95	21.5

Bingham, 1918

C.S.T. = 68

Isoamyl alcohol ($C_5H_{12}O$) + Ethylene chlorhydrin
(C_2H_5OCl)

Lecat, 1949

%	b. t.	Dt mix.
0	131.9	-
75	127.9	-0.5 Az
88	-	-0.3
100	128.6	-

Isoamyl alcohol ($C_5H_{12}O$) + Propylenchlorhydrin
($C_3H_7O_2Cl$)

Lecat, 1949

%	b. t.	Dt mix.
0	131.9	-
80	-	-0.5
81	127.3	Az
100	127.5	-

Isoamyl alcohol ($C_5H_{12}O$) + Cyclohexanol ($C_6H_{12}O$)

Wheeler and Jones, 1952

%	n_D	%	n_D
25°			
100	1.46472	38.98	1.42617
89.74	.45721	31.35	.42232
80.48	.45048	20.20	.41602
69.55	.44331	10.49	.41057
60.37	.43772	0	.40495
50.86	.43239		

2-Pentanol ($C_5H_{12}O$) + Methoxyglycol ($C_3H_8O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	119.3	-
7	119.7	Az
20	-	-2.0
100	124.5	-

Hexyl alcohol ($C_6H_{14}O$) + Cyclohexanol ($C_6H_{12}O$)

Trieschmann, 1935

mol%	σ	mol%	σ
22°			
0	26.23	73.20	24.73
31.68	25.34	88.56	24.68
54.09	24.95	100	24.65

Hexyl alcohol ($C_6H_{14}O$) + Ethyl lactate ($C_5H_{10}O_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	157.85	-
82	153.7	-1.5 Az
100	154.1	-

Heptyl alcohol ($C_7H_{16}O$) + Dichlorhydrin
($C_2H_4OCl_2$)

Lecat, 1949

%	b. t.	Dt mix.
0	176.15	-
53	174.2 Az	-
90	-	+0.7
100	175.8	-

Heptanol ($C_7H_{16}O$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b. t.	Dt mix
0	176.15	-
80	-	-1.5
83	174.1 Az	-
100	197.4	-

Heptanol ($C_7H_{16}O$) + Propyl lactate ($C_6H_{12}O_3$)

Lecat, 1949

%	b.t.	Dt mix
0	176.15	-
90	171.55	-0.8
100	171.7	-

Octyl alcohol ($C_8H_{18}O$) + Glycol ($C_2H_6O_2$)

Lecat, 1949

%	b.t.	Dt mix.
0	195.2	-
70	-	-2.5
71	189.5	Az
100	190.9	-

Isooctyl alcohol ($C_8H_{18}O$) (b.t.=180.4) + Alcohols

Lecat, 1949

2nd Comp.		Az			
Name	Formula	b.t.	%	b.t.	Dt mix
Glycol	$C_2H_6O_2$	197.4	79	175.55	-1.6
Glycol monoacetate	$C_4H_8O_3$	190.9	-	180.3	-
Isobutyl lactate	$C_7H_{14}O_3$	182.15	-	179.8	-
Dichlorhydrin sym.	$C_3H_6OCl_2$	175.35	85	173.35	+0.8
Dichlorhydrin as.	$C_3H_6OCl_2$	182.5	35	179.4	-

Sec.Octyl alcohol ($C_8H_{18}O$) + Ethyl tartrate ($C_8H_{14}O_6$)

Patterson, 1901

t	d	t	(α) _D
0%			
18.1	0.8212	-	-
28.9	.8131	-	-
36.9	.8070	-	-
48.1	.7982	-	-
60.8	.7880	-	-
79.3	.7728	-	-
5%			
17.8	0.8342	12.8	4.19
32.6	.8230	18.9	4.79
46.5	.8122	26	5.75
61.7	.7997	41.3	7.53
81	.7835		
10%			
18.4	0.8471	11.6	3.68
30.4	.8379	18	4.60
47	.8247	25.6	5.53
61.8	.8123	47	7.97
78.8	.7982	54.9	8.73
		67.5	9.92
		76.4	10.63
24.997%			
18.4	0.8895	12.1	3.27
32.2	.8783	18	3.96
47.9	.8652	25.2	5.10
64.4	.8511	41	7.08
80.3	.8374	48	7.84
		56.1	8.68
		63.6	9.38
		72.9	10.21
		79.4	10.76
50.02%			
19.1	0.9728	11.5	3.13
34.4	.9593	17.3	3.99
46.9	.9481	18.6	4.17
66.6	.9302	30.6	5.74
81	.9168	44	7.50
		58.2	8.90
		69.3	9.92
		77.5	10.66
		83	10.91
75.01%			
17	1.0777	11.9	4.08
29.1	.0663	16.7	4.76
50.1	.0462	26.6	6.14
65.7	.0312	40.4	7.79
81.6	.0161	53.3	9.07
		66.9	10.29
		76.3	11.06
		82.2	11.50

For 100%, see: Methyl alcohol + Ethyl tartrate.

Methoxyglycol ($C_3H_8O_2$) + Methoxydiglycol
($C_5H_{12}O_3$)

Simonetta and Barakan, 1947

t	mol%		t	mol%	
	L	V		L	V
22	99.0	68.0	23	23	11.0
25	94.0	54.0	22	42.5	91.5
26	87.0	34.0	22	52.5	93.0
23	77.5	27.0	23	76.0	97.0
23	71.5	17.5			

mol%	n_D	mol%	n_D
20°		25°	
100	1.4260	100	1.4249
95.05	.4250	72.50	.4203
57.00	.4177	57.00	.4167
42.50	.4153	42.50	.4136
38.00	.4129	38.00	.4119
24.00	.4094	24.00	.4090
14.94	.4067	7.50	.4033
7.50	.4045	0.00	.4013
0.00	.4023		

Methoxyglycol ($C_3H_8O_2$) + Ethylenchlorhydrin
(C_2H_5OCl)

Lecat, 1949

%	b. t.
0	124.5
69	130.0 Az
100	128.6

Ethoxyglycol ($C_4H_{10}O_2$) + Ethylenchlorhydrin
(C_2H_5OCl)

Lecat, 1949

%	b. t.	Dt mix.
0	135.3	-
15	135.65	-
52	-	+3.3
100	128.6	-

Butoxyglycol ($C_6H_{14}O_2$) + Furfuryl alcohol
($C_5H_6O_2$)

Lecat, 1949

%	b. t.
0	171.15
60	167.5 Az
100	169.35

Butoxyglycol ($C_6H_{14}O_2$) + Propyl lactate
($C_6H_{12}O_3$)

Lecat, 1949

%	b. t.
0	171.15
55	170.75 Az
100	171.2

Dimethyl-di-tert.butyl ethylene glycol sym.
($C_{12}H_{26}O_2$) f. t. = 88° + f. t. = 69°

Dacker, 1938

mol%	f. t.
0	88.0
10	82.0-83.4
20	76.2-78.2
28	72.8-73.6
30	73.2-74.0
33	73.2-74.2
38	73.3-74.5 (3+2)
41	73.5-74.4
50	72.0-73.3
60.4	69.3-70.5
70	66.9-68.4
80	65.0-68.4
86	64.9-65.6
90	65.3-66.5
100	69.0

Piper, 1937			
%	f.t.	%	f.t.
0	79.75	60	80.75
15	79.25	80	82
20	79.25	100	83.4
40	79.8		
Heptacosanol (C ₂₇ H ₅₆ O) + Octacosanol (C ₂₈ H ₅₈ O)			
Piper, Chibnall and Williams, 1934			
mol%	f.t.		
0	81.2-81.6		
50	81.6 (1+1)		
100	83.2-83.4		
Heptacosanol (C ₂₇ H ₅₆ O) + Nonacosanol (C ₂₉ H ₆₀ O)			
Piper, Chibnall and Williams, 1934			
mol%	f.t.		
0	81.2-81.6		
50	81.7 (1+1)		
100	84.6-85.0		
Octacosanol (C ₂₈ H ₅₈ O) + Triacontanol (C ₃₀ H ₆₂ O)			
Piper, Chibnall and Williams, 1934			
mol%	f.t.		
0	83.2-83.4		
50	83.6 (1+1)		
100	86.3-86.5		
Piper, 1937			
%	f.t.	%	f.t.
0	83.4	60	84
15	83	80	85.1
20	83	100	86.5
30	83.1		
40	83.3		

Triacontanol (C ₃₀ H ₆₂ O) + Dotriacontanol (C ₃₂ H ₆₆ O)			
Piper, Chibnall and Williams, 1934			
mol%	f.t.		
0	86.3-86.5		
50	86.7 (1+1)		
100	89.3-89.5		
Piper, 1937			
%	f.t.	%	f.t.
0	86.5	60	87.1
15	85.9	80	88.2
20	85.9	100	89.5
40	86.5		
Dotriacontanol (C ₃₂ H ₆₆ O) + Tetratriacontanol (C ₃₄ H ₇₀ O)			
Piper, Chibnall and Williams, 1934			
mol%	f.t.		
0	89.3-89.5		
50	89.6		
100	91.9-92.2		
Piper, 1937 (fig.)			
%	f.t.	%	f.t.
0	89.4	40	89.2
15	88.75	60	89.9
20	88.8	80	90.8
30	89	100	92.1
9,10-Epoxyoctadecyl alcohol (C ₁₈ H ₃₆ O ₂) cis + trans.			
Witnauer and Swern, 1950			
mol%	f.t.	mol%	f.t.
0	53.5-52.6	54.46	43.3-41.2
26.57	50.2-41.4	74.91	46.0-40.4
49.17	45.6-41.0	100	48.8-48.0

Allyl alcohol (C_3H_6O) + d-Mannitol ($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f.t.	mol%	f.t.
2.96	55.9	8.54	75
3.52	59.4	11.2	79.7
4.60	63.6	14.1	84.7
6.27	69.3		

Allyl alcohol (C_3H_6O) + l-Rhamnose hydrate
($C_6H_{14}O_6$)

Upson, Fluevog and Albert, 1935

mol%	f.t.	mol%	f.t.
4.03	35.8	10.72	54.5
4.49	38.2	14.90	59.8
6.28	46.1	15.62	60.5
7.58	49.2	18.60	62.4

Allyl alcohol (C_3H_6O) + Ethyl tartrate
($C_8H_{14}O_6$)

Patterson and Pollock, 1914

t	d	(α) _D	t	d	(α) _D
28.27%			49.81%		
8.6	0.941	11.17	11.5	1.009	10.03
23.2	.9275	12.13	21.3	1.000	10.80
35.3	.9165	13.16	34.2	0.988	11.86
46.2	.9065	13.70	43.6	0.9795	12.52
55.5	.8975	14.20	53.0	0.971	13.13

For 100%, see: Methyl alcohol + Ethyl tartrate.

Lowry and Dickson, 1924

%	(α)				
	6708Å	5893Å	5780Å	5461Å	4358Å
20°					
100	6.69	7.45	7.52	7.50	1.62
40	9.38	11.09	11.30	11.88	10.00

Glycol ($C_2H_6O_2$) + Trimethyleneglycol ($C_3H_8O_2$)

Clendenning, 1948 (fig.)

%	f.t.	%	f.t.
100	-26	30	-30
80	-39.5	20	-24
60	-	0	-14
50	-46		

Kinematic viscosity for 50% at low temperatures.
(see author)

Clendenning, 1948

Glycol ($C_2H_6O_2$) + Diglycol ($C_4H_{10}O_3$) ,
 Propylene glycol ($C_3H_8O_2$) ,
 Dipropylene glycol ($C_6H_{14}O_3$) ,
 Triglycol ($C_6H_{14}O_4$) ,
 Tetraglycol ($C_8H_{18}O_5$) ,
 Tetrahydrofurfuryl alcohol
 ($C_5H_{10}O_2$)

Kinematic viscosity for 50% at low temperatures.
(see author)Glycol ($C_2H_6O_2$) + Diglycol ($C_4H_{10}O_3$)

Skripach and Temkin, 1946

%		b.t.		$n_D^{20^\circ}$
L	V			
55	-	142		1.4402
61	9	143.5		.4410
68	15	145		.4420
72	25	147.5		.4426
80	41	153		.4438

Glycol ($C_2H_6O_2$) + Ethoxydiglycol ($C_6H_{14}O_3$)

Curme and Johnston, 1952

Az 760 mm 70.5% 195.0°

Nycander and Gabrielson, 1954

Az (36mm) : 73.4% 108.5°

Glycol ($C_2H_6O_2$) + Methyl malate 1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.976	-4.90	-5.90	-6.40	-6.90	-7.20	-7.60
24.988	-4.20	-5.00	-5.64	-6.48	-6.44	-
12.494	-4.08	-4.80	-5.12	-5.12	-4.88	-
4.975	-3.62	-4.22	-4.42	-4.22	-3.82	-3.42
2.4875	-3.22	-4.02	-3.62	-2.81	-2.41	-

Lecat, 1949

Glycol ($C_2H_6O_2$) (b.t. = 197.4) + Alcohols.

2 nd comp.		Az			
Name	Formula	b.t.	%	b.t. or Dt mix. or Sat.t.	
Glycol monoacetate	$C_4H_8O_2$	190.9	46 75	- 184.75	-2.9
Methoxy-diglycol	$C_5H_{12}O_3$	192.95	50 80	- 192.55	+0.8 -
Menthol	$C_{10}H_{20}O$	216.3	51.5	188.55	17.6
Citronellol	$C_{10}H_{20}O$	224.4	63	193.5	-2.2
Linalool	$C_{10}H_{18}O$	198.6	40	182.2	+1.8
Geraniol	$C_{10}H_{18}O$	229.6	50 67.5	- 194.65	-2.5 -
α-Terpineol	$C_{10}H_{18}O$	218.85	38 56	- 189.55	+0.5 -
β-Terpineol	$C_{10}H_{18}O$	210.5	50	185.4	-
Borneol	$C_{10}H_{18}O$	215.0	54.2	189.25	99
Benzyl alcohol	C_7H_8O	205.25	52 53.5	- 193.35	-1.7 -
Phenyl ethanol	$C_8H_{10}O$	219.4	69	194.4	-0.65
Phenyl propanol	$C_9H_{12}O$	235.6	50 75	- 195.5	-1.0

Glycol ($C_2H_6O_2$) + Glycerol ($C_3H_8O_3$)

Danusso, 1955

mol %	d	v
30°		
0	1.1047	1643
17.26	.1309	1697
36.92	.1731	1769
57.33	.2027	1808
58.95	.2049	1815
74.74	.2253	1854
100	.2544	1911

v = ultrasound velocity (m/sec.)

Glycol ($C_2H_6O_2$) + Tetrahydrofurfuryl alcohol
($C_5H_{10}O_2$)

Clendenning, 1948 (fig.)

t	η (centistokes. 10 ²)		
	0 %	50 %	100 %
20	1270	1130	760
10	1490	1310	910
0	1730	1500	1070
-10	1990	1760	1260
-20	-	2020	1480
-30	-	2370	1740
-40	-	2740	2020
-50	-	-	2510

Trimethyleneglycol ($C_3H_8O_2$) + 2,3-Butanediol
($C_4H_{10}O_2$)

Clendenning, 1948 (fig.)

%	f.t.	%	f.t.
50	-33	80	+ 2
60	-20	90	+10
70	- 8	100	+17

2,3-Butanediol ($C_4H_{10}O_2$) dl + levo

Watson, Coope and Barnwell, 1951

%	(α) _D	%	(α) _D
25°			
0.0	0.0	65.5	-8.30
22.8	-2.04	83.2	-10.58
41.5	-5.32	100.0	-12.74
54.7	-6.98		

2,3-Butanediol ($C_4H_{10}O_2$) dl + meso

Watson, Coope and Barnwell, 1951

%	n_D	%	n_D
25°			
0.0	1.43102	61.0	1.43486
21.6	.43219	75.6	.43592
38.5	.43334	100.0	.43719
47.5	.43396		

2,3-Butanediol ($C_4H_{10}O_2$) meso + levo

Watson, Coope and Barnwell, 1951

%	n_D	%	n_D
25°			
0.0	1.4310	46.9	1.4339
17.1	.4320	56.5	.4345
19.2	.4322	70.8	.4355
37.7	.4334	80.1	.4361
41.3	.4336	94.2	.4368
41.4	.4336	100.0	.4372

2,3-Butanediol ($C_4H_{10}O_2$) + Tetrahydrofurfuryl alcohol ($C_5H_{10}O_2$)

Clendenning, 1948 (fig.)

%	f. t.	%	f. t.
0	17	40	-12.5
10	11	50	-28
20	5.5	60	-47
30	-3	65	-60

Kinematic viscosity for 50% at low temperatures
(see author)

Diethylglycol ($C_6H_{14}O_2$) rac. + meso.

Young, Cristol and Weiss, 1943 (fig.)

mol%	f. t.	mol%	f. t.
0	21.7	50	48
10	16	60	59
20	11	70	68
21.5	10 E	80	76
30	22	90	83
40	38	100	87

Butyl glycol ($C_6H_{14}O_2$) + Ethanolamine (C_2H_7ON)

Lecat, 1949

%	b. t.	Dt mix.
0	171.15	-
43	166.95 Az	-
50	-	+2.3
100	170.8	-

Glycol monoacetate ($C_4H_8O_3$) + Methoxydiglycol ($C_5H_{12}O_3$)

Lecat, 1949

%	b. t.
0	190.9
35	188.0 Az
100	192.95

Methoxyglycol ($C_3H_8O_2$) + Methoxydiglycol
($C_5H_{12}O_3$)

Simonetta and Barakan, 1947

t	mol%		t	mol%	
	L	V		L	V
22	99.0	68.0	23	23	11.0
25	94.0	54.0	22	42.5	91.5
26	87.0	34.0	22	52.5	93.0
23	77.5	27.0	23	76.0	97.0
23	71.5	17.5			

mol%	n_D	mol%	n_D
20°		25°	
100	1.4260	100	1.4249
95.05	.4250	72.50	.4203
57.00	.4177	57.00	.4167
42.50	.4153	42.50	.4136
38.00	.4129	38.00	.4119
24.00	.4094	24.00	.4090
14.94	.4067	7.50	.4033
7.50	.4045	0.00	.4013
0.00	.4023		

Methoxyglycol ($C_3H_8O_2$) + Ethylenchlorhydrin
(C_2H_5OCl)

Lecat, 1949

%	b. t.
0	124.5
69	130.0 Az
100	128.6

Ethoxyglycol ($C_4H_{10}O_2$) + Ethylenchlorhydrin
(C_2H_5OCl)

Lecat, 1949

%	b. t.	Dt mix.
0	135.3	-
15	135.65	-
52	-	+3.3
100	128.6	-

Butoxyglycol ($C_6H_{14}O_2$) + Furfuryl alcohol
($C_5H_6O_2$)

Lecat, 1949

%	b. t.
0	171.15
60	167.5 Az
100	169.35

Butoxyglycol ($C_6H_{14}O_2$) + Propyl lactate
($C_6H_{12}O_3$)

Lecat, 1949

%	b. t.
0	171.15
55	170.75 Az
100	171.2

Dimethyl-di-tert.butyl ethylene glycol sym.
($C_{12}H_{26}O_2$) f. t. = 88° + f. t. = 69°

Dacker, 1938

mol%	f. t.
0	88.0
10	82.0-83.4
20	76.2-78.2
28	72.8-73.6
30	73.2-74.0
33	73.2-74.2
38	73.3-74.5 (3+2)
41	73.5-74.4
50	72.0-73.3
60.4	69.3-70.5
70	66.9-68.4
80	65.0-68.4
86	64.9-65.6
90	65.3-66.5
100	69.0

Diglycol ($C_6H_{10}O_3$) + Triglycol ($C_6H_{14}O_4$)

Skrupach and Temkin, 1946

b. t.	mol. %		$n_D^{20^\circ}$
	L	V	
165	0	0	-
169	26	3	1.4482
172.5	42	7	.4497
178	60	10	.4516
184	74	19	.4530
190	79	23	.4535
196	86	27	.4541
201	92	44	.4547
206	100	82	.4558

Diglycol ($C_6H_{10}O_3$) Phenoxyglycol ($C_8H_{10}O_2$)

Lecat, 1949.

%	b. t.
0	245.5
-	244.5 Az
100	245.2

Methoxydiglycol ($C_5H_{12}O_3$) + Benzyl alcohol
(C_7H_8O)

Lecat, 1949

%	b. t.	Dt mix.
0	205.25	-
-	192.5 Az	-
90	-	-0.2
100	192.95	-

Ethoxydiglycol ($C_6H_{14}O_3$) + Isoamyl lactate
($C_8H_{16}O_3$)

Lecat, 1949

%	b. t.
0	201.9
38	201.0 Az
100	202.4

Butoxydiglycol ($C_8H_{18}O_3$) + Geraniol ($C_{10}H_{18}O$)

Lecat, 1949

%	b. t.
0	232.2
-	228.5 Az
100	229.6

Dioxyacetone , monomer ($C_5H_6O_3$) + dimer ($C_6H_{12}O_6$)

Tollenaar, 1936

mol%	f. t.	mol%	f. t.
0	83	46.2	98
6.4	82	61.8	107
15.4	79	70.3	112
25.5	79	100	117
33.2	85		

Glycerol ($C_3H_8O_3$) + Triglycol ($C_6H_{14}O_4$)

Lecat, 1949

%	b. t.	Dt mix.
0	290.5	-
46	-	-0.1
63	285.1 Az	-
100	218.7	-

Glycerol ($C_3H_8O_3$) + Methyl malate-1 ($C_6H_{10}O_5$)

Grossmann and Landau, 1910

g/100 cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.
20°						
49.844	-3.91	-4.71	-5.52	-6.02	-5.82	-5.42
24.922	-2.57	-2.97	-3.21	-3.21	-2.93	-
12.461	-2.49	-2.49	-2.09	-1.44	+0.24	-
4.960	-2.42	-2.02	-1.41	-0.0	+0.40	+1.41
2.480	-2.02	-0.81	+2.02	+3.23	+3.63	-

Glycerol ($C_3H_8O_3$) + Ethyl tartrate ($C_8H_{14}O_6$)

Holmes, 1913

%	d	%	d
15°			
100	1.20990	54.263	1.24028
86.833	.22034	47.663	.24376
77.577	.22674	42.513	.24636
68.038	.23262	37.676	.24869
60.224	.23693	0	.26396

Patterson, 1901			
t	d	t	d
0 %			
13.2	1.2651	75.5	1.2256
30	1.2552	99.5	1.2097
54	1.2397		
4.985 %			
17.1	1.2620	57	1.2366
40	1.2475	99	1.2076
9.906 %			
17.3	1.2601	68.2	1.2263
37	1.2474	99.5	1.2044
57	1.2338		
23.455 %			
8.5	1.2600	60	1.2238
21.4	1.2512	100	1.1944
45.2	1.2344		
48.125 %			
10	1.2480	70	1.1993
36.3	1.2269	100	1.1749
55	1.2116		
69.93 %			
19	1.2289	80	1.1752
45	1.2059	97	1.1592
59.5	1.1932	100	1.1575
89.98 %			
8	1.2271	72	1.1643
17	1.2178	78	1.1582
35	1.2004	100	1.1377
53	1.1828		

Glycerol (C ₃ H ₈ O ₃) + Cyclohexanol (C ₆ H ₁₂ O)					
Danusso, 1955					
mol%	d	v*	mol%	d	v*
30°					
0	0.9409	1448	73.44	1.1491	1613
26.75	1.0016	1478	86.76	.2004	1769
52.82	1.0763	1529	100	.2544	1911
*v= ultrasound velocity (m/sec.)					

Methoxytriglycol (C ₇ H ₁₆ O ₄) + Phenoxyglycol (C ₈ H ₁₀ O ₂)					
Lecat, 1949					
%		b. t.			
0		245.25			
45		244.0 Az			
100		245.2			

Erythritol (C ₄ H ₁₀ O ₄) + Mannitol (C ₆ H ₁₄ O ₆)					
Pushin and Dezelic, 1932					
mol%	f. t.	E	mol%	f. t.	E
0	118	-	50	140	100
10	114.5	110	60	147	100
16	112	111	70	152	80
20	111	"	80	157	85
30	121.5	"	90	161	-
40	131	109	100	164	-

Pentaerythritol (C ₅ H ₁₂ O ₄) + Dipentaerythritol (C ₁₀ H ₂₂ O ₇)					
Friederich and Brün, 1930 (fig.)					
%		f. t.	%		f. t.
0		270	60		200
12		237	70		205
24		210	80		210
30		190 E	90		214
40		192	100		221
50		195			

For 100 %, see : Methyl alcohol + Ethyl tartrate .					
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METHYL LACTATE + CYCLOPENTANOL

1139

Methyl lactate ($C_4H_8O_3$) + Cyclopentanol
($C_5H_{10}O$)

Lecat, 1949

%	b.t.	Dt mix.
0	143.8	-
19	140.2 Az	-
50	-	-0.2
100	140.85	-

Ethyl lactate ($C_5H_{10}O_3$) + Cyclohexanol ($C_6H_{12}O$)

Lecat, 1949

%	b.t.	Dt mix.
0	154.1	-
80	-	-1.1
94	153.95 Az	-
100	160.8	-

Propyl lactate ($C_6H_{12}O_3$) + Methylcyclohexanol-1,2
($C_7H_{14}O$)

Lecat, 1949

%	b.t.	Dt mix.
0	171.7	-
20	-	-1.0
66	167.8 Az	-
100	168.5	-

Isopropyl lactate ($C_6H_{12}O_3$) + Cyclohexanol
($C_6H_{12}O$)

Lecat, 1949

%	b.t.
0	166.8
-	160.7 Az
100	160.8

Isopropyl lactate ($C_6H_{12}O_3$) + Methylcyclohexanol
($C_7H_{14}O$)

Lecat, 1949

%	b.t.
0	166.8
33	165.5 Az
100	168.5

Isoamyl lactate ($C_8H_{16}O_3$) + Linalool ($C_{10}H_{18}O$)

Lecat, 1949

%	b.t.
0	202.4
-	184.75 Az
100	202.4

Methyl malate ($C_6H_{10}O_5$) + Methyl tartrate
($C_6H_{10}O_6$)

Timmermans and Vesselovsky, 1932

%	mol%	f.t.	%	mol%	f.t.
d + 1					
100	100	48	50.0	47.6	28
80.9	79.4	41	38.1	33.0	25
70.3	68.3	36	25.3	24.0	23
57.0	54.7	28	14.5	13.4	15
56.2	53.9	28			
1 + 1					
100	100	48	42.2	39.9	24.5
83.2	81.8	41	22.9	21.3	20.5
69.5	67.5	34	14.2	13.1	13
50.7	48.3	27.5			

Methyl malate 1 ($C_6H_{10}O_5$) + Benzyl alcohol
(C_7H_8O)

Grossmann and Landau, 1910

g/100cc	(α)					
	red	yellow	green	pale blue	dark blue	viol.

20°

49.974	-6.60	-9.30	-10.81	-11.91	-12.51	-13.41
24.987	-8.28	-10.09	-12.45	-15.09	-15.61	-
12.4935	-9.04	-11.53	-13.13	-16.49	-17.69	-
5.112	-10.56	-11.74	-13.50	-17.02	-18.00	-19.76
2.556	-10.95	-12.13	-14.08	-18.00	-19.95	-

c=g malate in 100 cc

Methyl tartrate ($C_6H_{10}O_6$) d+l

Roozeboom, 1885 and Adriani, 1900

%	f.t.	%	f.t.
0	43.3	20	78.7
0.98	41.7	25	81.8
1.51	41.6	30	84.2
2.39	45.0	35	85.9
3.30	50.6	40	87.3
4.59	57.0	45	88.5
10	66.8	50	89.4

Centnerszwer, 1899

%	f.t.	%	f.t.
0.0	-	30.0	87.8
2.4	64.4	34.9	89.6
5.1	67.8	39.5	90.0
10.2	83.5	44.4	90.3
15.2	84.3	47.2	90.1
20.2	88.7	50.0	-
25.1	88.0		

Groh, 1912

t	crystallization velocity (mm/min.)
0 %	
35	3.21
30	3.50
25	3.48
15	1.79
6.25 %	
25	0.21
15	0.21
12.5 %	
45	0.28
35	0.32
25	0.26
18.75 %	
45	1.23
35	0.99
25 %	
55	3.33
45	3.63
35	3.46
31.25 %	
55	6.88
45	7.16
43.15	
55	15.2
45	14.8
50 %	
70	12.0
60	17.4
57	17.9
55	17.9

Ethyl tartrate ($C_8H_{14}O_6$) d+rac.

Beck, 1904

mol%	f.t.	d	85°	90°
		at f.t.+1°		
0	48	1.315	1.268	1.252
5	-	-	1.266	-
10	-	-	-	1.252
15	-	-	-	"
20	67	1.295	1.271	"
25	-	-	-	"
30	-	-	-	"
50	81	1.271	1.271	-
100	84	1.275	1.275	-

mol%	at f.t.+1°	η (water ²⁵ =1)	85°	90°
0	159.3	14.023	11.054	
5	-	14.251	-	
10	-	-	10.854	
15	-	-	10.761	
20	33.415	13.971	10.748	
25	-	-	10.587	
30	-	-	10.541	
50	18.693	14.58	-	
100	14.464	14.464	-	

Ethyl tartrate ($C_8H_{14}O_6$) + Benzyl alcohol
(C_7H_8O)

Patterson and Stevenson, 1912

t	d	t	d
90%		76.62%	
17	1.0636	20	1.0819
20	.0613	21.4	.0825
46.9	.0408	45.1	.062
		75.6	.9362
		101.1	.0143
t	(α) _D	t	(α) _D
90%		76.62%	
17	28.19	20	26.23
20	28.00	21.4	26.17
46.9	26.11	45.1	25.16
		75.6	23.85
		101.1	22.95

Ethyl tartrate ($C_8H_{14}O_6$) + β -Phenylethyl alcohol
($C_8H_{10}O$)

Patterson and Stevenson, 1912

t	(α) _D	t	(α) _D
73.7%			
20	4.48	17.1	4.495
40.7	4.545	33	4.525
27.8	4.52	43.1	4.61

Ethyl tartrate ($C_8H_{14}O_6$) + γ -Phenylpropyl alcohol ($C_9H_{12}O$)

Patterson and Stevenson, 1912

t	(α) _D	t	(α) _D
75.17%			
16.2	3.59	38.2	3.815
20	3.63	42	3.865
28.7	3.73		

Isobutyl tartrate ($C_{12}H_{22}O_6$) d + l

Campbell, 1929

%	f. t.	%	f. t.
0.00	69.8	32.8	53.4 E
1.57	69.0	34.10	54.5
4.19	67.7	41.44	55.9
9.43	65.2	46.52	56.8
21.26	60.0	48.64	52.0
24.24	57.0	50.60	57.2

Methyl β - Oxy - β - phenylpivalate ($C_{12}H_{16}O_3$)
(+) + (-)

Matell, 1949-50

%	f. t.	%	f. t.
0.0	71.0	74.8	65
50.0	69.5	79.8	64
55.8	69	84.5	65
58.8	68.5	89.4	67.5
64.4	67.5	94.0	69.5
69.4	66	100.0	71

Dulcitol ($C_6H_{14}O_6$) + Mannitol ($C_6H_{14}O_6$)

Gillot, 1904

%	f. t.	%	f. t.
100	169.0	30	158.5
95	163.6	25	161.4
90	160.71	20	165.6
80	158.1	15	171.8
70	159.2	10	180.8
60	159.5	5	185.2
50	159.6	0	188.8
40	159.2		

Dulcitol ($C_6H_{14}O_6$) + Glucose ($C_6H_{12}O_6$)

Gillot, 1904

%	f. t.	%	f. t.
100	144.5	30	147.7
95	140.7	25.2	155.4
90	139.8	20	164.7
85	140.0	15	171.3
80	140.9	12.5	176.3
70	140.5	10	178.4
60	140.7	5	183.9
50	139.0	0	188.8
40	140.3		

Dulcitol ($C_6H_{14}O_6$) + Saccharose ($C_{12}H_{22}O_{11}$)

Gillot, 1904

%	f. t.	%	f. t.
100	189.2	30	169.0
95	177.6	25	169.7
90	169.7	20	174.1
80	170.1	17.5	177.9
70	169.3	15	178.0
60	169.8	10	182.0
50	169.7	5	184.7
40	169.4	0	188.8

Mannitol ($C_6H_{14}O_6$) + Glucose ($C_6H_{12}O_6$)

Gillot, 1904

%	f. t.	%	f. t.
0	169.0	60	132.8
5	161.2	70	132.9
10	157.0	80	136.1
20	144.3	90	136.8
30	135.4	95	139.1
40	134.4	100	144.4
50	132.9		

Mannitol ($C_6H_{14}O_6$) + Saccharose ($C_{12}H_{22}O_{11}$)

Gillot, 1904

%	f. t.	%	f. t.
0	169.0	60	155.6
5	166.5	70	155.8
10	162.9	80	156.6
20	157.8	90	165.7
30	155.5	95	178.1
40	157.6	100	189.2
50	153.7		

Glucose ($C_6H_{12}O_6$) + Saccharose ($C_{12}H_{22}O_{11}$)

Gillot, 1904

%	f. t.	%	f. t.
100	189.2	60	139.3
95	175.8	50	135.6
92.5	169.8	40	139.8
90	165.8	30	134.8
87.5	158.0	20	139.6
85	150.4	10	140.5
80	143.9	5	141.9
70	140.7	0	144.4

Lactose ($C_{12}H_{22}O_{11}$) + Saccharose ($C_{12}H_{22}O_{11}$)

Gillot, 1904

%	f. t.	%	f. t.
100	189.2	50	176.8
95	184.4	40	181.2
90	182.2	30	184.5
85	180.4	20	191.7
80	180.3	10	200.1
70	176.4	5	202.3
60	173.8	0	206.0

Methyl 3,3,3-trichlor-2-oxybutyrate ($C_5H_7O_2Cl_3$)
(-) + (+)

Ross, 1936

%	f. t.	%	f. t.	%	f. t.
0.0	62.6	41.6	58.0	73.4	50.9
5.6	59.2	41.8	57.7	76.0	49.8
10.4	56.9	50.0	58.8	78.7	48.0
16.3	51.7	53.1	58.5	78.9	48.4
22.1	48.6	57.3	58.3	82.0	50.4
22.2	48.3	62.3	57.2	85.6	52.5
25.2	49.6	65.6	55.6	89.7	56.2
28.0	52.3	65.8	55.8	94.5	58.8
35.8	56.1	68.1	55.1	100.0	62.6

Lactamide (C_5H_7ON) d + l

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	54	-	61.4	74.5	47
93	50.1	46	47	76.1	47
87	62	46	0	54	-
75.5	70.2	47			
(1+1)					

Lactamide d (C_5H_7ON) + Malic amide l ($C_4H_5O_3N_2$)

Van Lancker, 1938

mol%	f. t.	E
100	160	-
68.8	144	55
53.5	136	48
27.5	116.5	48
0 E:6 mol%	54	-

Lactamide l (C_5H_7ON) + Malic amide l ($C_4H_5O_3N_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	160	-	33.0	122	48
53.4	136	50	18.2	106	47
50.5	135	48	0	54	-
38.0	124	48			
E : 5 mol%					

Lactamide d (C_5H_7ON) + Tartramide I ($C_4H_6O_4N_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	205	-	43.8	179	48
73.1	196	60	21.5	159	50
62.4	193	53	0	54	-
52.5	186	50			
E : 5 mol%					

Lactamide I (C_5H_7ON) + Tartramide I ($C_4H_6O_4N_2$)

Van Lancker, 1938

mol%	f. t.	E
100	205	-
73.1	195	60
43.0	178	49
32.5	179	49
0	54	-

Malic amide ($C_4H_6O_3N_2$) d + I

Timmermans and Vesselovsky, 1932

%	f. t.	E	%	f. t.	E
100	156	-	75	156	147
90	154	146	70	157-158	"
87.5	153	147	65	159	"
85	152	"	62.5	160	"
80	153-154	"	50	163	-

Tartaric amide ($C_4H_6O_4N_2$) d + I

Timmermans and Vesselovsky, 1932

%	f. t.	%	f. t.
100	196	75	209
95	195-196	65	216
85	199	50	226

Chloral hydrate ($C_2H_3O_2Cl_3$) + Menthol ($C_{10}H_{20}O$)

Pawlewski, 1893

mol%	f. t.	mol%	f. t.
0	56.5	95.29	52.5
5.28	49.9	96.71	46.7
10.55	42.6	97.50	38.5
15.76	36.3	100	39.8
20.45	43.0		

Bis (2-Hydroxyethyl) sulfone ($C_4H_{10}O_4S$) +
Bis (2-Hydroxyethyl) sulfoxide ($C_4H_{10}O_3S$)

Rheinboldt and Giesbrecht, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0.0	58.1	57.3	61.3	96.1	81.8
5.1	62.1	58.1	78.6	104.2	93.5
19.7	72.3	63.4	94.6	111.0	106.0
41.9	85.9	72.0	100.0	112.3	111.0

1,2-Methylcyclohexanol ($C_7H_{14}O$) + Furfuryl
alcohol ($C_5H_6O_2$)

Lecat, 1949

%	b. t.
0	168.5
-	168.3 Az
100	169.35

Geraniol ($C_{10}H_{18}O$) + 2-Phenylethanol ($C_8H_{10}O$)

Lecat, 1949

%	b. t.
0	229.6
-	219.0 Az
100	219.4

1,2-Cyclohexanediol ($C_6H_{12}O_2$) cis + trans.

Svirbely and Goldhagen, 1953

%	f. t.	m. t.	%	f. t.	m. t.
0.0	99.2	-	52.62	72.8	71.8
4.99	95.7	82.2	56.95	73.5	-
10.25	92.7	-	58.80	79.7	72.1
13.92	90.2	-	65.05	84.6	-
20.04	86.5	80.4	70.05	90.0	-
22.00	84.7	-	77.67	94.7	-
24.99	83.5	82.3	74.30	98.4	71.7
31.59	80.9	77.4	90.80	102.8	-
39.52	78.6	76.1	100.00	-	-
49.26	74.9	-	-	-	-

E: 56.6% 71.9°

1,4-Cyclohexanediol ($C_6H_{12}O_2$) cis + trans.

Coops, Dienske and Atere, 1938

%	f. t.	%	f. t.
0	112	30	103
10	108	40	104
15	103.5	45	104.5
16	102	50	107
17	"	60	116
18	"	70	123.5
20	102.5	85	134.5
25	"	100	143

(1+1) tr. t. = 102°

Borneol ($C_{10}H_{18}O$) d + l

Ross and Somerville, 1926

%	f. t.	%	f. t.
0.0	206.5	64.6	206.2
18.7	206.4	75.9	206.2
28.0	206.6	87.6	206.1
50.5	206.4	89.5	206.8
59.2	206.0	100.0	207.2

Borneol d ($C_{10}H_{18}O$) + Fenchyl alcohol l
($C_{10}H_{18}O$)

Fischer, 1940

mol%	f. t.	E	mol%	f. t.	E
0	207.0	-	76.9	18.7	15
18.0	176.3	-	80.9	21.9	"
40.6	130.2	-	88.0	29.7	"
56.0	86.1	11	100.0	42.1	-

Borneol ($C_{10}H_{18}O$) + Benzyl alcohol (C_7H_8O)

Lecat, 1949

%	b. t.	Sat. t.
0	215.0	-
14.2	205.07	-8 Az
100	205.25	-

Borneol ($C_{10}H_{18}O$) + Phenylethanol ($C_8H_{10}O$)

Lecat, 1949

%	b. t.
0	215.0
85	214.7 Az
100	219.4

 α -Terpineol ($C_{10}H_{18}O$) + Phenylethanol ($C_8H_{10}O$)

Lecat, 1949

%	b. t.	Dt mix.
0	218.85	-
67	217.85	-1.4 Az
100	219.4	-

 α -Terpineol ($C_{10}H_{18}O$) + Diglycol ($C_4H_{10}O_3$)

Lecat, 1949

%	b. t.	Dt mix.
0	228.85	-
52	-	+0.8
86.5	217.45	Az
100	245.5	-

Terpin ($C_{10}H_{20}O_2$) + Terpin hydrate ($C_{10}H_{22}O_3$)

Schoorl, 1932 (fig.)

%	f. t.	%	f. t.
100	123	40	116.8
90	122.8	30	112
80	122.7	20	105.7
70	122.5	10	95 E
60	121.3	0	105
50	119	-	-

Tetralinediol I ($C_{10}H_{12}O_2$) trans + cis.

Lettre and Lerch, 1952 (fig.)

mol%	f.t.	mol%	f.t.
0	152	75	136
22	141 E	95	116 E
30	144	100	121
50	148 (1+1)		

Tetralindiol rac. ($C_{10}H_{12}O_2$) trans + cis.

Lettre and Lerch, 1952 (fig.)

mol%	f.t.	mol%	f.t.
0	133	75	131
15	126 E	90	115 E
25	133	100	118
50	140 (1+1)		

Tetralindiol trans ($C_{10}H_{12}O_2$) d + l

Lettre and Lerch, 1952 (fig.)

mol%	f.t.
0	152
25	140
42	130 E
50	132

Tetralindiol cis - trans ($C_{10}H_{12}O_2$) d + l

Lettre and Lerch, 1952 (fig.)

mol%	f.t.
0	148
25	142
50	138

Menthol I ($C_{10}H_{20}O$) + Fenchyl alcohol I
($C_{10}H_{18}O$)

Fischer, 1940

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	42.1	-	59.5	-2.2	-17.9
25.8	22.3	+3.8	75.4	+20.6	-7.5
43.5	4.5	-3.5	100	42.0	-
49.4	-4.0	-18.1			

Menthol ($C_{10}H_{20}O$) + Phenyl ethanol ($C_8H_{10}O$)

Lecat, 1949

%	b.t.	Sat.t.
0	216.3	-
70	215.05	35 Az
100	219.4	-

Menthol ($C_{10}H_{20}O$) + Dibromhydrin as.
($C_8H_6OBr_2$)

Lecat, 1949

%	b.t.
0	216.3
22	216.2 Az
100	219.5

3,4-di(p-Hydroxycyclohexyl)hexane rac. ($C_{18}H_{34}O_2$) +
Dihydrostilbestrol rac ($C_{18}H_{22}O_2$)

Ungnade and Morris, 1947 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	133	130	50	107-108	102
5	132	120	55	107.5	"
10	129	109	60	106	"
15	123	103	70	112	"
20	119	"	75	116	"
25	105-104	"	80	118	"
27	106	"	85	122	102
30	105.5	"	90	123	106
35	106-107	"	95	125	120
40	106	102.5	100	126	125
45	107				

Epicholestanol ($C_{27}H_{48}O$) + Cholestanol
($C_{27}H_{48}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	181	180.5	82	140	135
25	169	161	90	134.5	134.5
50	156.5	149	100	141.5	140
75	143	137			

Epicholestanol ($C_{27}H_{48}O$) + Coprosterol
($C_{27}H_{48}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	181	180.5	62	145.5	129
25	166.5	154.5	75	136	118.5
50	150	142	92	110	100
53	150	141.8	100	99.5	98

Cholestanol ($C_{27}H_{48}O$) + Epicoprosterol
($C_{27}H_{48}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	141.5	140	65	143.5	130
5	138.5	128	75	137.5	115
17.5	133	128	82	131.5	110
25	140	128	89	116	"
29	142.5	128.5	92	115	"
50	152.5	148	100	117	116.5

(1+1)

Cholestanol ($C_{27}H_{48}O$) + Allo- α -Ergostanol
($C_{28}H_{50}O$)

Bonstedt, 1932

%	f.t.
100	142
75	141.6
50	141.8
25	142.4
0	142

Cholestanol ($C_{27}H_{48}O$) + γ -Sitostanol ($C_{29}H_{52}O$)

Bonstedt, 1932

%	f.t.	%	f.t.
100	142.9	40	137.5
75	139.5	25	140.5
60	137	0	142
50	133		

Cholestanol ($C_{27}H_{48}O$) + Cholesterol ($C_{27}H_{46}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	141	141	60	135	131.7
10	140.5	138.5	66	132	132
20	140	137	70	135	132.5
30	139	135	80	140	133
40	138	132.5	90	143	138
50	136.5	132	100	145	145

Coprosterol ($C_{27}H_{48}O$) + Epicoprosterol
($C_{27}H_{48}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	99.5	98	50	87	71.5
25	88	75	62	97	71.5
33	84.5	71.5	75	103.5	78.5
40	80	71.5	100	117	116.5

Epicoprosterol ($C_{27}H_{48}O$) + Ergosterol ($C_{28}H_{50}O$)

Lettre', 1932 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
100	140.5	137	43	147	140
93	137	135.5	25	139	121
75	144.5	138	10	124	115
50	151	148	0	117	116.5
(1+1)					

Epidihydroergosterol ($C_{28}H_{46}O$) +
Dihydroergosterol ($C_{28}H_{46}O$) I. or II.

Lettre', 1930 (fig.) I.

%	f. t.	%	f. t.
0	208	62.5	204.2
9	205	75	200
25	199.5	92	187.5
35	202	97.5	172.5
50	204.5	100	173
(1+1)			

Lettre', 1932 (fig.) II.

%	f. t.	m. t.	%	f. t.	m. t.
0	214	210.5	51	206.5	204.5
7	210	202.5	75	200.5	180.5
16	202	200.5	85	195.5	175.5
25	203	200	100	173	172
40	206	200			
(1+1)					

Epidihydroergosterol ($C_{28}H_{46}O$) + Ergosterol
($C_{28}H_{46}O$)

Lettre', 1932 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	214	212.5	75	185	161
25	202.5	194.5	80	182.5	160
49	190.5	188	95	174	160
60	189	174	100	161.5	160.5

Dihydroergosterol ($C_{28}H_{46}O$) + Ergosterol
($C_{28}H_{46}O$)

Lettre', 1932 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	172.5	172.5	60	165.5	161.5
10	172	170	70	163.5	161
20	170.5	168	80	162.5	160.5
30	169	175.5	90	161.5	160.5
40	168	163.5	100	161.5	161
50	167	163			

Epidihydrolumisterol ($C_{28}H_{46}O$) + Dihydrolumiste-
rol ($C_{28}H_{46}O$)

Lettre', 1932 (fig.)

%	f. t.	m. t.
0	140	139
5	150	138.5
10	159	138.5
20	170	149.5
30	177.5	162.5
40	182	177.5
50	186	181.5 (1+1)
60	183	175.5
80	175	159.5
90	165	150
100	140	139

Epidihydrolumisterol ($C_{28}H_{46}O$) + Calciferol
($C_{28}H_{46}O$)

Lettre', 1932 (fig.)

%	f. t.	m. t.
0	139.5	138.5
9	136	129
25	131.5	128.5
30	130	128.5
50	133	128.5 (1+1)
57	131	128
75	125	118
96	117	116.8
100	118	117.5

Dihydrolumisterol ($C_{28}H_{46}O$) + Calciferol
($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
0	139.5	138.5	75	101	90
25	124	105	87	109.5	95
50	109	91	100	118	117
68	98	89			

Lumisterol ($C_{28}H_{44}O$) + Pyrocalciferol
($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.
0	115.5	112
25	108.5	98
50	101.5	92
75	94.5	98
100	96	95

Lumisterol ($C_{28}H_{44}O$) + Vitamine D ($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.
0	114.5	113.5
10	112	108.5
25	117.5	110
37.5	120	115
50	122	120 (1+1)
65	120	115
75	117	108
90	107.5	109
100	116	115.5

Lumisterol ($C_{28}H_{44}O$) + Pyrovitamine ($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	%	f.t.
0	116	75	128
19	108.5	95	112
25	120	100	113.5
50	132.5 (1+1)		

Vitamine D ($C_{28}H_{44}O$) + Pyrocalciferol ($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	m.t.
0	116.5	115
12.5	110	107.5
22	108	107
25	113	102
50	122	120 (1+1)
75	112	97.5
90	94.7	95.5
91	94.8	94.8
100	95	94

Vitamine D ($C_{28}H_{44}O$) + Pyrovitamine ($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	E	%	f.t.	E
0	116	115	50	104	95
19	108.5	95	75	108.2	95
25	106.5	95	82	109.5	95
33	102	95	100	113	108.5

Pyrocalciferol ($C_{28}H_{44}O$) + Pyrovitamine
($C_{28}H_{44}O$)

Lettre', 1932 (fig.)

%	f.t.	%	f.t.
0	96	75	116.5
5	95	92	110
25	115	100	115
50	120 (1+1)		

Dihydrostilbestrol ($C_{18}H_{22}O_2$) + Stilbestrol
($C_{18}H_{20}O_2$)

Ungnade and Morriss, 1947 (fig.)

%	f.t.	m.t.	%	f.t.	m.t.
100	168	168	50	124	119
90	162	140	40	120	119
80	156	126	30	120	118
70	146	120	20	120	118
62	134	-	10	123	118
60	130	119	0	127	126

Dihydrostilbestrol-meso ($C_{18}H_{22}O_2$) + Stilbestrol
($C_{18}H_{20}O_2$)

Ungnade and Morriss, 1947 (fig.)

%	f. t.	E	%	f. t.	E
0	186	185	65	169	168
10	178	170	70	"	"
20	176	169	74	"	"
30	174	168	80	"	"
40	172	169	92	168.5	"
48	170	168.5	100	168	"
60	169.5	168			

Jacques, 1949

%	f. t.	m. t.	%	f. t.	m. t.
0	185	185	60	170	167
10	178	177	80	168	167
20	177	170	100	167	166
40	171	168			

Dihydrostilbestrol ($C_{18}H_{22}O_2$) + α -Estradiol
($C_{18}H_{24}O_2$)

Ungnade and Morriss, 1947 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	187	186	40	143	137
5	183	-	56	141	136
15	176	148	69	150	137
20	174	-	76	157	-
30	168	140	84	166	148
32	155	-	100	170	168

Stilbestrol ($C_{18}H_{20}O_2$) + π -Stilbestrol
($C_{18}H_{20}O_2$)

Walton, 1943

%	f. t.	m. t.	%	f. t.	m. t.
0	171.5	170.5	63	140	136
10	166.5	155	64	139.5	136
20	161.5	147	65	140.5	137
30	156.5	136	70	144	136
40	153	139	80	147	137
50	146	137	90	151	141
60	144	136	100	151.5	150.5

Stilbestrol ($C_{18}H_{20}O_2$) + α -Estradiol ($C_{18}H_{24}O_2$)

Ungnade and Morriss, 1947 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	168.5	168	60	145	135
10	163	148	70	151	-
25	152	136	80	158	-
30	146	134	85	163	144
40	137	135	90	167	149
50	137	135	100	170	168

Benzoin ($C_{14}H_{12}O_2$) + Hydrobenzoin ($C_{14}H_{14}O_2$)

Carre' and Mauclere, 1931

mol%	f. t.	mol%	f. t.
0	132	60	112
10	126	70	119
20	116	80	124.5
30	108.5	90	130
40	99 E	100	134
50	105		

Isohydrobenzoin ($C_{14}H_{14}O_2$) d + l

Eisenlohr and Hill, 1937

%	m. t.	f. t.	%	m. t.	f. t.
0	148.5	148.5	55	125	120
5	148	144	60	130	122
10	147	140	65	134	124
15	145	136	70	138	127
20	144	133	75	141	130
25	148	130	80	144	133
30	137.5	127	85	145	134
35	134	124	90	147	140
40	130	122	95	148	144
45	125	120	100	148.5	148.5
50	119	119			

Methyl mandelate ($C_9H_{10}O_3$) d + l

Centnerszwer, 1899

%	f. t.	%	f. t.
100	54.6	62.5	48.3
95.1	52.3	54.8	49.2
87.5	50.0	50.0	50.0
75.5	47.5	(1+1)	

Ross, 1936

%	f.t.	%	f.t.
100	54.4	50.0	53.3
95.2	51.2	43.0	52.6
90.9	48.5	33.9	50.3
87.0	46.1	21.2	48.4
83.3	46.4	16.3	46.7
80.0	48.2	12.8	46.8
80.0	49.7	8.9	48.8
66.7	50.2	4.7	52.0
57.1	52.8	0	54.4

Angus and Owen, 1943

%	f.t.	%	f.t.
100.0	47.8	80.82	44.0
98.42	46.8	75.25	48.0
94.42	44.4	72.50	49.0
92.15	43.0	70.46	49.6
88.87	41.2	68.60	50.2
86.69	39.8	64.80	50.7
85.32	39.0	58.10	51.7
83.84	41.6	50.0	52.2

E : 84.5% 38.4°

Ethyl mandelate ($C_{10}H_{12}O_3$) d + l

Ross, 1936

%	f.t.	%	f.t.
100	29.8	50.0	28.1
83.3	22.9	45.6	27.2
75.0	17.0	40.0	25.8
71.4	16.1	33.3	24.7 (1 + 1)
66.7	24.4	25.0	15.2
62.5	27.1	20.0	20.1
60.0	27.1	0	29.8
54.6	27.1		

Angus and Owen, 1943

%	f.t.	%	f.t.
100.00	28.4	71.03	21.8
91.40	24.0	68.48	23.0
87.40	21.8	60.80	25.8
83.18	19.4	57.10	26.6
76.10	18.0	50.00	27.4

E : 76% 16.2°

Isobutyl mandelate ($C_{12}H_{16}O_3$) d + l

Centnerszwer, 1899

%	f.t.	%	f.t.
100	35.3	62.6	37.8
95.0	33.3	54.7	38.2
87.3	32.9	50.0	38.7
75.0	37.0		(1 + 1)

Angus and Owen, 1943

%	f.t.	%	f.t.
100.0	35.2	75.6	29.8
97.6	34.1	71.4	32.3
95.2	32.8	67.0	34.6
91.3	31.2	62.7	35.8
87.3	29.0	62.0	36.0
82.1	27.0	57.4	37.1
79.4	27.3	50.0	38.2

E : 80.5% 26.2°

l-Menthyl mandelate ($C_{18}H_{26}O_3$) d + l

Findlay and Hickmans, 1907

%	f.t.	%	f.t.
100.00	77.6	54.65	83.5
94.88	76.0	50.00	83.7
89.93	73.8	45.87	83.7
86.57	72.4	41.77	83.6
85.17	72.8	36.15	82.3
77.63	76.2	33.63	82.7
72.92	78.5	26.08	86.1
63.54	82.1	14.03	91.5
58.26	82.8	0.00	97.2
		(1+1)	

4-Oxybenzthiazol (C_7H_5ONS) + 8-Oxyquinoline
(C_9H_7ON)

Erlenmeyer and Ueberwasser, 1938

%	f.t.	m.t.	%	f.t.	m.t.
100	75.5	75	10.4	139	106
91	75	74	20.6	142	114
77.7	75	73	0.0	143.5	143
49.8	116	76			

Carvoxime ($C_{10}H_{15}ON$) d + l

Rheinboldt and Kircheisen, 1926

%	f.t.	m.t.	%	f.t.	m.t.
100	72.0	70.0	40.1	90.5	88.0
90.4	78.0	73.0	39.9	90.5	87.5
80.1	84.5	78.5	31.0	89.0	84.0
70.5	88.0	83.0	20.3	85.0	79.0
59.6	91.0	88.0	10.7	79.5	75.0
51.0	92.0	91.0	0.0	72.0	70.5

%	f.t.	m.t.	%	f.t.	m.t.
100	72.0	70.0	31.4	90.0	84.5
89.7	79.5	74.0	31.4	90.0	85.0
76.6	85.0	80.0	22.7	87.0	80.5
72.8	87.5	81.0	13.6	82.0	76.0
58.9	90.5	88.0	0.0	72.0	70.5
49.5	91.5	88.0			

(1+1)

Adriani, 1900

%	f.t.	m.t.	%	f.t.	m.t.
100	72.0	72.0	20	84.6	80.0
99	72.4	-	10	79.9	75.0
98	77.4	-	5	75.4	73.0
75	86.4	82.0	2	73.0	-
50	91.4	91.4	1	72.4	-
40	90.4	-	0	72.0	72.0
30	88.2	85.0			

Beck, 1904

%	f.t.	d	η (0% = 1)
		at f.t. + 1°	
100	72.0	1.0140	0.997
70	87.3	.0100	.658
50	93.4	.0084	.521
30	87.2	.0106	.659
0	72.0	.0160	1.000

3,3,5,5-Tetramethyl-1-cyclohexanone oxime
($C_{10}H_{19}ON$) + Isophorone oxime ($C_9H_{15}ON$)

Kanabus, 1950

mol%	f.t.	mol%	f.t.
100	78	40	87
90	76	30	102
80	73	20	116
70	70	10	130
55	65 E	0	145
50	73		

Camphoroxime ($C_{10}H_{17}ON$) d + l

Adriani, 1900

%	f.t.	tr.t.	
		I	II
0	118.8	112.6	-
10	"	110.6	-
20	"	-	-
30	"	-	86
40	"	-	97
50	"	109.4	103
60	"	-	97
70	"	109.7	-
80	"	-	-
90	"	110.6	-
95	"	-	-
100	"	112.6	-

Beck, 1904

%	d	η (0% = 1)
	115.8°	
100	1.0110	1.00
50	.0108	1.00
0	.0107	1.00

Benzaldoxime (C_7H_7ON) $\alpha + \beta$

Cameron, 1898

%	f.t.	%	f.t.
0	34-35	26.3	46
4.0	30.0	50.8	79
5.0	28.6	73.8	101
8.3	26.2	100	130
E : 9%	25-26	"natural" f.t. : 6%	27.7°

Schoevers, 1908

%	f.t.	%	f.t.
0	36	10	42.1
5	32.4	15	48.1
7	35.6	20	57.2
8.8	39.35	100	127.5
E: 26.2-26.4°			
"natural" f.t.: 29.9°			

Benzaldoxime (C_7H_7ON) $\alpha + \alpha'$

Beck, 1904

%	f.t.	d	η (0% = 1)
at f.t. +1.5°			
100	16.0	1.1178	1.164
75	21.0	.1160	.1251
50	24.9	.1151	.082
25	28.9	.1152	.073
0	34.5	.1150	.000

p-Anisaldoxime ($C_8H_9O_2N$) $\alpha + \beta$

Carveth, 1899

%	f.t.
0	62.8
100	134.0
"natural" f.t.: 54.2°	

Anisaldoxime ($C_8H_9O_2N$) cis + trans

Skau and Saxton, 1933

%	f.t.	E	%	f.t.	E
0	62.6	-	19.48	56.7	56.7
4.23	60.8	56.4	22.76	64	56.6
7.62	59.5	56.3	33.63	80	56.6
10.61	58.6	56.6	100	127	-
14.79	57.8	56.8			
"natural" f.t.: 87.7% 58.4°					

Phenol (C_6H_6O) + Hydroquinone ($C_6H_6O_2$)

Jaeger, 1907

%	f.t.	%	f.t.
0	42	13.3	72.5
5	34	13.7	75
6.2	49.25	25.7	107
8.3	53	100	161

Phenol (C_6H_6O) + Pyrocatechol ($C_6H_6O_2$)

Jaeger, 1907

%	f.t.	%	f.t.
0	42	64.5	83
7.6	37	75.7	91
30	50.5	100	104

Phenol (C_6H_6O) + Resorcinol ($C_6H_6O_2$)

Jaeger, 1907

%	f.t.	%	f.t.
100	110	12.5	33
70.2	39.5	0	42
13.7	31.5		

Hrynakowski and Jeske, 1938

%	E	%	E
at room t.			
0	9.8	53	11.8
10	11.2	60.6	12.0
25	11.3	76	12.5
40	11.8	91	11.1
44	12.9	100	12.2

Phenol (C_6H_6O) + o-Cresol (C_7H_8O)

Fox and Barker, 1917

%	b. t.	%	b. t.
760 mm			
100	191.0	45	186.0
95	190.3	40	185.6
90	189.8	35	185.2
85	189.4	30	184.8
80	188.9	25	184.3
75	188.5	20	183.9
70	188.1	15	183.4
65	187.7	10	183.0
60	187.4	5	182.6
55	186.8	0	182.2
50	186.4		

Fox and Barker, 1918

%	b. t.	%	b. t.
100	190.5	40	185.5
90	190	30	185
80	189	20	184
70	188	10	183
60	187.5	0	182.1
50	186.5		

Rhodes, Wells and Murray, 1925

L	%	V	L	%	V
at b. t.					
6.4		5.0	65.25		59.6
18.75		14.08	66.4		60.0
24.5		20	81.9		77.3
41.1		35.2			

Fox and Barker, 1918

%	f. t.	%	f. t.
100	30.0	40	20
90	27	30	24
80	24	20	29
70	21	10	35
60	20	0	40.5
50	19.7		

Dawson and Mountford, 1918

wt%	mol%	f. t.	wt%	mol%	f. t.
0	0	40.5	36.96	33.78	19.7
9.00	7.93	35.8	39.43	36.16	19.9
14.72	13.06	32.6	42.47	39.12	19.85
15.82	14.06	32.05	46.10	42.68	19.85
21.46	19.22	28.7	48.81	45.35	19.95
24.54	22.06	27.05	58.63	55.23	20.75
28.28	25.55	24.65	69.70	66.69	22.5
30.69	27.82	23.1	75.75	73.11	24.05
31.84	28.9	23.0	80.00	77.69	24.85
34.27	31.21	21.15	86.93	85.14	26.7
34.54	31.47	21.2	91.41	90.25	27.95
36.00	32.87	20.55	100	100	30.45

Knight, Lincoln and al., 1918 (fig.)

%	f. t.
0	40.6
30	21.1
100	29.0

Fox and Barker, 1917

%	d	%	d
15.5°			
100	1.0516	70	1.0597
95	.0529	65	.0610
90	.0543	60	.0623
85	.0557	55	.0636
80	.0570		
75	.0584		

Knight, Lincoln and al., 1918 (fig.)

%	d
45°	
0	1.0543
30	.0450

Kendall and Beaver, 1921

mol%	η	$\kappa \cdot 10^8$	mol%	η	$\kappa \cdot 10^8$
25°					
100	7608	0.127	30.73	8645	2.583
86.57	7835	.375	24.21	8731	3.321
80.27	7930	.415	19.97	8757	4.196
70.00	8099	.612	12.70	8825	5.422
61.19	8235	.693	9.90	8851	6.183
50.90	8404	.885	0	8945	8.84
37.17	8565	1.686			

Phenol (C_6H_6O) + m-Cresol (C_7H_8O)

Fox and Barker, 1917

%	b. t.	%	b. t.
100	202.3	45	189.3
95	201.3	40	188.6
90	199.4	35	187.8
85	197.7	30	187.7
80	196.2	25	186.4
75	194.8	20	185.5
70	193.6	15	184.8
65	192.5	10	184.0
60	191.4	5	183.2
55	190.5	0	182.4
50	189.9		

Fox and Barker, 1918

%	b. t.	%	b. t.
100	202.2	40	188.5
90	199.5	30	187.0
80	196.5	20	185.5
70	193.5	10	184.0
60	191.5	0	182.1
53	190.0		

Rhodes, Wells and Murray, 1925

L	%	V	L	%	V
at b. t.					
2.25		1.4	48.8		35.8
8.75		5.25	72.7		58.7
28.0		16.9	84.0		73.8

Dawson and Mountford, 1899

wt%	mol%	f. t.	wt%	mol%	f. t.
0	0	40.5	61.93	58.59	25.05
11.73	10.32	35.4	70.25	67.24	25.8
16.26	14.35	33.55	74.36	71.62	25.25
24.23	21.75	29.95	79.72	77.37	24.2
29.83	26.96	27.4	81.94	79.80	23.1
39.98	36.66	22.8	87.54	85.92	19.5
43.44	40.00	21.1	91.52	90.37	15.2
48.37	44.92	21.6	93.72	92.85	11.2
56.54	53.07	24.0	95.89	95.31	7.6
60.40	57.01	24.95	100	100	10.0
(1+2)					

Fox and Barker, 1918

%	f. t.	%	f. t.
100	+2.4	40	20
90	-4 E	30	26
80	+14	20	30
70	17	10	35
60	13	0	40.5
53	10.2 E		
(1+2)			

Knight, Lincoln and al., 1918 (fig.)

%	f. t.
0	40.6
30	24.0
100	3.0

Fox and Barker, 1917

%	d	%	d
15.5°			
100	1.0387	75	1.0476
95	.0404	70	.0492
90	.0422	65	.0513
85	.0440	60	.0532
80	.0457		

Knight, Lincoln and al., 1918 (fig.)

%	d
45°	
0	1.0543
30	.0413

Kendall and Beaver, 1921

mol%	η	$\kappa \cdot 10^8$	mol%	η	$\kappa \cdot 10^8$
25°					
100	13420	1.397	36.48	9961	4.197
87.41	12500	.592	26.75	9698	5.694
75.51	11690	.887	18.10	9598	5.923
68.63	11310	2.175	10.79	9206	6.810
61.52	10950	.587	6.99	9105	7.431
54.98	10700	.988	0	8945	8.84
48.26	10400	3.379			

Howell and Robinson, 1933

%	$\kappa \cdot 10^3$	%	$\kappa \cdot 10^3$
50°			
100	25.9	42.50	25.6
94.60	26.2	37.42	25.3
88.30	26.3	32.53	22.5
82.97	27.9	29.35	21.6
75.73	27.2	23.47	17.8
70.33	28.3	20.14	16.8
63.72	28.3	16.30	15.5
59.92	27.1	10.61	10.6
53.57	26.7	5.32	6.7
48.18	26.6	0.0	2.1

Howell and Jackson, 1934

wt%	mol%	ϵ	wt%	mol%	ϵ
50°					
100	100	9.32	45.00	41.59	9.80
90.02	88.70	.41	40.02	36.74	.86
80.01	77.79	.51	35.00	31.91	.87
75.00	72.31	.53	29.98	27.15	.95
70.00	67.01	.59	24.99	22.48	.97
65.00	61.78	.60	20.03	17.90	10.00
60.00	56.63	.64	20.00	17.87	10.03
55.02	51.57	.72	15.01	13.32	10.07
50.00	45.53	.76	9.99	8.81	10.17
		0	0		10.28

Phenol (C_6H_6O) + p-Cresol (C_7H_8O)

Rhodes, Wells and Murray, 1925

%		%	
L	V	L	V
at b. t.			
8.5	5.5	67.3	55.6
25.5	16.0	78.4	68.0
43.1	30.2	80.0	70.0

Fox and Barker, 1917

%	b.t.	%	b.t.
100	201.7	45	188.1
95	200.1	40	187.5
90	198.4	35	186.8
85	196.7	30	186.1
80	195.3	25	185.4
75	194.2	20	184.8
70	193.0	15	184.2
65	191.7	10	183.5
60	190.8	5	182.9
55	189.8	0	182.3
50	189.0		

Saunier, 1948 and 1950 (fig.)

%	dew point	bubble point
760 mm		
100	201.5	201.5
90	200.1	198.2
80	198.3	195.2
70	196.3°	193.0
60	194.4	191.0
50	192.4	189.2
40	190.4	187.7
30	188.1	186.1
20	186.2	185.0
10	184.1	183.5
0	182.2	182.2

Lunge, 1882 and 1885

%	f.t.	%	f.t.
0	+40.5	33.26	6.0
1.39	32.5	51.65	-2.0
2.95	30.0	59.58	+1.0
4.69	28.0	68.21	5.0
7.18	26.0	76.57	13.0
12.35	24.0	83.70	20.0
18.29	18.0	90.10	26.0
21.63	15.75	95.91	29.0
25.76	12.5	100	32.5
30.23	8.5		

Dawson and Mountford, 1899

wt%	mol%	f.t.	wt%	mol%	f.t.
0	0	40.5	53.90	50.45	+0.1
12.50	11.06	32.35	57.50	54.06	0.75
20.04	18.00	26.8	60.55	57.17	0.8
24.50	22.02	23.9	62.88	59.59	4.65
29.07	26.27	19.6	68.18	65.10	10.0
33.76	30.75	15.25	76.27	73.67	16.55
38.21	34.92	11.05	79.60	77.25	19.5
42.45	39.07	6.65	83.63	81.64	22.3
43.22	39.83	4.9	84.17	82.23	22.75
45.11	41.70	2.5	91.47	90.32	28.15
47.37	43.33	+0.2	96.06	95.49	31.2
49.77	46.33	-1.4	100	100	34.15

Fox and Barker, 1917

%	f.t.	%	f.t.
100	36.0	40	+7
90	26	30	17
80	18	20	26
70	8	10	34
60	-2	0	40.5
53	-9		

Knight, Lincoln and al., 1918

%	f. t.
0	40.6
30	15.75
90	26.1
100	34.4

%	d	
	25°	45°
100	1.0312	-
90	.03491	-
30	-	1.0424
0	-	.0543

Fox and Barker, 1917

%	d	%	d
	15.5°		
100	1.0388	70	1.0495
95	.0401	65	.0514
90	.0420	60	.0534
85	.0438	55	.0554
80	.0457	50	.0574
75	.0476	45	.0594

Kendall and Beaver, 1921

mol%	η	$\kappa \cdot 10^8$	mol%	η	$\kappa \cdot 10^8$
	25°				
100	14740	1.378	36.15	10420	4.972
84.02	13270	2.210	24.13	9835	5.863
68.09	12180	3.012	12.17	9463	7.151
61.49	11750	3.423	0	8945	8.84
47.82	10990	4.201			

Phenol (C_6H_6O) + Cresol (C_7H_8O)

Fischer and Gröppel, 1917

%	f. t.	%	f. t.
52.7	9.5	25.5	26
51.9	10	24.7	26.5
51.0	10.5	23.8	27
50.2	11	23.0	27.5
49.3	11.5	22.1	28
48.5	12	21.3	28.5
47.6	12.5	20.4	29
46.8	13	19.6	29.5
45.9	13.5	18.7	30
45.1	14	17.9	30.5
44.2	14.5	17.0	31
43.4	15	16.2	31.5
42.5	15.5	15.3	32
41.7	16	14.5	32.5
40.8	16.5	13.6	33
40	17	12.8	33.5
39.1	17.5	11.9	34
38.3	18	11.1	34.5
37.4	18.5	10.2	35
36.6	19	9.4	35.5
35.7	19.5	8.6	36
34.9	20	7.7	36.5
34.0	20.5	6.8	37
33.2	21	6.0	37.5
32.3	21.5	5.1	38
31.5	22	4.3	38.5
30.6	22.5	3.4	39
29.8	23	2.6	39.5
28.9	23.5	1.7	40
28.1	24	0.9	40.5
27.2	24.5	0	41
26.4	25		

Phenol (C_6H_6O) + Thymol ($C_{10}H_{14}O$)

Paterno and Ampola, 1897

%	f. t.	%	f. t.
100	49.24	56.52	14.74
99.30	48.56	54.99	13.31
98.55	47.88	53.19	11.89
97.20	46.87	51.55	9.68
96.25	46.00	50.31	8.29
94.92	44.79	48.17	7.47
93.15	43.54	46.41	9.08
92.23	42.84	44.66	10.80
90.95	41.69	41.51	12.90
89.35	40.52	24.72	25.82
84.15	36.84	22.33	27.57
82.11	35.43	23.32	28.66
79.46	33.64	17.81	30.24
77.42	32.30	15.48	31.58
75.30	30.80	13.09	32.82
73.72	29.75	11.01	33.86
73.15	29.75	9.81	35.07
71.01	26.82	6.69	36.20
69.17	25.09	4.72	37.12
67.55	24.38	3.30	37.78
65.68	22.40	2.27	38.30
62.23	20.50	1.43	38.77
60.5	19.17	0.79	39.07
57.66	15.58	0.31	39.40
		0.0	39.53

Paterno, 1896

%	D f.t.	%	D f.t.
0.79	-0.46	11.00	5.67
1.43	0.76	13.08	6.71
2.26	1.23	15.02	7.95
3.30	1.75	17.80	9.29
4.72	2.41	20.71	10.74
6.69	3.33	22.33	11.83
8.81	4.46	24.73	13.58

Pushin, Marich and Rikovski, 1948

mol%	f.t.	E	mol%	f.t.	E
100	31	-	40	-	12
90	44.5	-	30	19	12
80	40	11	20	26.5	14
65	30	11.5	10	34	-
50	20.5	12	0	41	-

Phenol (C_6H_6O) + Methyl salicylate ($C_8H_8O_3$)

Paterno, 1896

%	D f.t.	%	D f.t.
0.52	-0.26	11.10	-5.50
3.32	1.54	15.16	7.72
5.40	2.51	18.86	9.84
8.15	3.92	23.20	12.54

Phenol (C_6H_6O) + Salicylic aldehyde ($C_7H_6O_2$)

Kremann and Zechner, 1925

%	f.t.	E	%	f.t.	E
0.0	41	-	56.5	-26.5	-
14.8	20	-	60.2	-22	-
24.2	10	-	64.6	-19	-30
33.0	3	-30	70.7	-15	-30
41.0	-7	-	77.1	-12	-
48.9	-19.5	-30	80.3	-10.5	-30
52.7	-30	-30	100	-7	-

Phenol (C_6H_6O) + m-Oxybenzaldehyde ($C_7H_6O_3$)

Kremann, Lupfer and Zawodsky, 1920

%	f.t.	E	%	f.t.	E
0	40.5	-	25.1	87.0	-
1.5	39.2	-	28.1	95.0	-
5.0	36.5	-	30.6	103.0	-
9.6	32.0	-	36.0	114.0	-
13.2	31.0	31.0	41.5	126.0	30.5
20.6	68.0	30.5			

Phenol (C_6H_6O) + p-Oxybenzaldehyde ($C_7H_6O_3$)

Lang, 1912 and Schmidlin and Lang, 1912

%	f.t.	%	f.t.
100	115	40.0	47
91.1	109	38.0	45
76.1	96	35.9	42
63.1	82.4	35.2	38.5
56.3	74.8	35.0	39.7
50.0	67	30.0	25
49.0	66	25.0	22.9
45.0	59.4	20.0	27.3
42.8	55	15.0	31.3
41.0	51.6	5.0	38
40.0	49.5	0	41

Phenol (C_6H_6O) + o-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b.t.
0	182.2
75	174.5 Az
100	176.8

Phenol (C_6H_6O) + p-Aminophenol (C_6H_7ON)

Kremann and Pogantsch, 1923

%	f.t.	E	%	f.t.	E
0.0	41	-	56.5	63	-
8.3	35	-	63.2	72	-
16.3	29	-	69.8	78	-
25.9	22	22	78.7	86	-
36.6	38	22	88.8	96	-
43.6	47	22	100	105	-
48.7	54	-			

Phenol (C ₆ H ₆ O) + m-Aminophenol (C ₆ H ₇ ON)					
Kremann, Lupfer and Zawodsky, 1920					
%	f. t.	E	%	f. t.	E
0	40.5	-	48.7	71.8	-
2.8	38.5	-	52.2	76.0	15.0
5.3	36.0	-	55.0	76.0	-
7.6	34.3	-	59.1	83.0	75.0
10.8	32.0	-	63.7	89.5	-
15.4	28.0	-	68.6	95.0	-
19.7	25.2	-	71.7	98.0	-
25.2	20.5	-	75.0	101.0	-
28.6	16.2	15.4	81.4	107.0	-
31.1	15.4	"	86.4	110.0	-
34.1	23.0	-	90.0	112.0	-
39.7	45.0	-	94.1	114.5	-
43.4	55.0	-	100	118.0	-
46.5	67.0	-			
(1+1)					
Phenol (C ₆ H ₆ O) + Picric acid (C ₆ H ₃ O ₇ N ₃)					
Philip, 1903					
%	f. t.	%	f. t.		
0	40.4	65.0	82.3		
9.8	37.5	71.9	83.0		
16.6	44.2	75.6	81.6		
23.0	55.0	80.3	84.2		
33.5	65.4	84.5	91.8		
48.4	75.2	87.7	97.4		
52.7	77.5	100	120		
60.4	80.9			(1+1)	
Kremann, 1904					
%	f. t.	%	f. t.		
0.0	41.0	63.5	83.0		
8.2	38.8	65.1	83.0		
14.4	39.0	69.9	85.0		
21.7	53.0	73.2	84.0		
29.4	61.5	74.7	83.0		
35.3	68.0	77.3	82.5		
40.2	72.0	79.5	83.0		
46.3	75.5	88.0	87.0		
52.7	79.0	90.1	101.5		
53.7	80.0	95.8	111.5		
59.9	82.0	100.0	122.5	(1+1)	
Rheinboldt, 1925					
wt%	mol%	f. t.	E		
0.0	0.0	42.5	41.5		
9.0	3.9	39.0	36.0		
16.9	7.7	47.0	36.0		
37.2	19.5	71.5	36.2		
55.5	33.9	82.5	36.3		
61.7	45.1	85.0	51.0		
66.7	45.1	85.0	51.0		
71.6	50.9	86.0	81.5		
76.9	57.8	83.0	80.5		
83.7	67.8	92.0	80.5		
91.2	81.0	106.0	81.0		
94.7	88.0	112.0	81.5		
98.0	95.3	118.0	82.0		
100.0	100.0	122.5	122.2		
(1+1)					
Phenol (C ₆ H ₆ O) + Styphnic acid (C ₆ H ₃ O ₈ N ₃)					
Efremov, 1931					
mol%	f. t.	I	tr. t.	II	E
100	175.5	-	-	-	-
92.54	168.9	-	-	-	-
87.94	165.6	-	-	-	-
77.55	154.0	-	-	-	-
69.05	145.8	-	-	-	-
60.55	136.1	112.2	43.6	-	-
57.03	131.2	114.0	48.4	35.1	-
53.51	127.7	114.3	52.8	33.5	-
50.00	125.7	114.8	53.2	34.2	-
47.22	121.2	114.0	52.5	34.2	-
44.16	118.0	114.5	53.9	34.3	-
41.11	115.1	-	52.9	34.6	-
38.82	112.0	91.5	51.2	34.5	-
36.53	108.8	91.2	52.3	35.2	-
33.33	104.5	91.5	51.5	34.5	-
32.12	100.9	-	52.8	34.8	-
27.72	91.6	-	55.5	36.2	-
24.04	90.8	-	54.2	36.7	-
20.37	87.0	-	53.3	37.1	-
17.24	82.7	-	50.3	37.2	-
14.12	78.1	-	50.7	36.9	-
8.76	60.7	-	49.7	37.4	-
6.44	50.0	-	-	37.7	-
4.13	40.5	-	-	37.8	-
1.94	40.6	-	-	37.7	-
0	41.6	-	-	-	-
(1+1)					
(1+2) = all unstable					
(1+3)					

Phenol (C_6H_6O) + β -Naphthol ($C_{10}H_8O$)

Migliacci and Gargiulo, 1927

%	f. t.	E	min.
0	43.0	-	-
10	36.7	26.1	540
15	33.1	26.5	840
20	29.3	26.0	1245
25	30.2	26.2	1260
30	40.5	26.3	1080
40	54.6	26.9	880
50	67.8	26.2	510
60	80.5	25.9	330
70	91.4	-	-
80	102.5	-	-
90	112.3	-	-
100	122.0	-	-

Pyrocatechol ($C_6H_6O_2$) + Hydroquinone ($C_6H_6O_2$)

Jaeger, 1907

%	f. t.	%	f. t.
100	170	26	103
71.5	153	13.9	97
35.6	119	0	104

Senden, 1923

%	f. t.	%	f. t.
100	170.5	37.82	122
86.45	163	29.882	105.2
78.5	158.5	23	91
71.36	155	18.304	91.4
55.174	144	8.389	98
48.52	138	0	103.5
44.791	133		

Hrynakowski, 1934

E: 29% 92.0°

Pyrocatechol ($C_6H_6O_2$) + Resorcinol ($C_6H_6O_2$)

Jaeger, 1907

%	f. t.
0	104.0
11.5	95.5
45.7	76.0
88.6	102.5
100	110.0

Senden, 1923

%	f. t.	%	f. t.
0	103.5	56	68
10.71	97	57.4	70
18.97	91.7	62.31	76.6
30.18	83.8	69.629	85.8
39.64	76.5	79.59	96.3
49.2	67.8	88.78	103
55	66.2	100	109.5

Hrynakowski and Adamanis, 1935

mol%	f. t.	E	min.
100	110.0	-	-
95.0	106.0	-	-
90.0	102.0	-	-
85.0	98.0	-	-
80.0	94.5	-	-
75.0	90.0	-	-
70.0	86.0	68.0	0.8
65.0	83.0	69.0	0.9
60.0	77.5	70.0	1.3
55.0	74.0	69.0	1.3
50.0	70.0	70.0	1.3
48.0	70.0	70.0	-
45.0	71.0	-	-
40.0	76.0	70.0	1.0
35.0	80.0	69.0	1.1
30.0	85.0	69.0	0.8
25.0	88.0	-	-
20.0	91.5	-	-
15.0	95.0	-	-
10.0	98.0	-	-
5.0	100.5	-	-
0	104	-	-

Dingemans, 1937					
%	f. t.	%	f. t.		
100	109.6	45.0	75.9		
90.0	103.3	40.0	79.6		
80.0	96.7	30.0	86.4		
70.0	89.1	20.0	92.7		
60.0	79.8	10.0	98.4		
55.0	74.7	0	103.4		
Pyrocatechol (C ₆ H ₆ O ₂) + Thymol (C ₁₀ H ₁₄ O)					
Lecat, 1949					
%	b. t.				
0	245.9				
83	232.2 Az				
100	232.9				
Pyrocatechol (C ₆ H ₆ O ₂) + Carvacrol (C ₁₀ H ₁₄ O)					
Lecat, 1949					
%	b. t.				
0	245.9				
70	236.7 Az				
100	237.85				
Pyrocatechol (C ₆ H ₆ O ₂) + m-Oxybenzaldehyde (C ₇ H ₆ O ₂)					
Kremann and Pogantsch, 1923					
%	f. t.	E	%	f. t.	E
0	103	-	52.4	61	61
12.6	96.5	-	60.2	68	"
21.2	90	-	65.0	73	"
33	82	61	71.5	80	-
37.6	76	-	85.5	91.5	-
45.9	69	61	100	105	-
Pyrocatechol (C ₆ H ₆ O ₂) + m-Aminophenol (C ₆ H ₇ ON)					
Kremann, Lüpfer and Zawodsky, 1920					
%	f. t.	E	%	f. t.	E
100	118.0	-	59.3	81.2	-
94.7	115.5	-	56.2	78.0	-
94.2	115.2	-	52.4	73.0	66.0
92.3	114.2	-	50.7	70.5	"
90.1	113.5	-	49.9	70.5	"
90.0	112.5	-	48.8	-	"
88.4	111.5	-	47.9	-	"
85.1	109.2	-	45.4	-	"
83.6	109.5	-	42.7	67.2	"
82.1	107.5	65.0	39.5	71.0	-
78.5	104.5	-	36.3	74.0	66.0
78.1	104.0	-	33.3	76.1	"
75.6	101.0	-	30.5	78.0	-
73.9	99.5	-	27.0	80.5	-
72.4	98.2	66.0	24.8	82.5	-
69.6	94.5	-	21.0	86.5	-
68.3	94.0	-	17.0	89.0	-
66.3	91.0	-	14.3	91.2	-
65.5	90.0	-	10.4	94.0	-
63.2	88.0	-	7.1	96.5	-
62.6	86.5	-	4.4	98.0	-
60.9	83.5	-	0	101.5	-
60.0	81.8	-			
Pyrocatechol (C ₆ H ₆ O ₂) + Picric acid (C ₆ H ₃ N ₃ O ₇)					
Philip and Smith, 1905					
%	f. t.	%	f. t.		
0.0	103.4	67.5	122.4		
13.7	99.7	76.1	119.8		
19.9	97.8	79.6	117.7		
22.9	96.8	83.9	112.9		
30.3	103.0	87.5	107.3		
36.9	108.8	91.7	107.3		
48.5	116.5	95.0	112.8		
58.6	120.8	100.0	120.25	(1+1)	
Pyrocatechol (C ₆ H ₆ O ₂) + Styphnic acid (C ₆ H ₃ O ₈ N ₃)					
Efremov, 1931					
mol%	f. t.	E	mol%	f. t.	E
0	175.5	-	69.02	124.0	97.2
6.44	170.2	-	72.99	121.0	98.0
10.49	166.9	-	76.96	117.3	"
19.68	158.2	-	80.41	113.7	"
27.72	149.0	120.7	83.86	109.5	98.6
35.76	138.2	123.4	86.89	103.6	98.8
42.59	128.6	-	89.91	100.2	98.6
45.71	127.3	123.0	92.58	100.4	98.8
48.83	128.6	-	95.25	103.3	97.2
50.0	129.0	-	97.74	103.8	-
54.29	126.3	-	98.86	104.3	-
59.75	128.3	-	100	104.5	-
64.39	125.8	94.6			
E ₁ : 24.5% 123.4° E ₂ : 81.6% 98.6° (1+1)					

Resorcinol ($C_6H_6O_2$) + Hydroquinone ($C_6H_6O_2$)

Jaeger, 1907

%	f. t.
0	110
19.2	98
25.6	119
71.5	153
100	170

Senden, 1923

%	f. t.	%	f. t.
0	109.5	36.91	110.5
9.9	102.3	40.01	118.5
17.068	97.4	49.97	130.5
27.4	90.4	65.79	148
28.463	89.4	84.46	162
31.1	88	100	170.5
32.458	95		

Hrynakowski and Adamanis, 1935

mol%	f. t.	E	min.
0	110	-	-
5.0	108.9	-	-
10.0	103.0	-	-
15.0	99.5	92.0	0.4
20.0	96.0	"	0.6
23.0	92.0	"	-
25.0	95.0	"	0.5
30.0	103.0	"	0.4
35.0	111.5	"	0.4
40.0	117.9	"	0.3
45.0	125.5	"	0.4
50.0	131.0	"	0.2
55.0	133.5	"	0.2
60.0	141.0	"	0.2
65.0	145.0	"	0.3
70.0	148.0	"	0.1
75.0	152.0	-	-
80.0	155.0	-	-
85.0	161.0	-	-
90.0	163.0	-	-
95.0	166.5	-	-
100	172	-	-

Dionissiev and Rudenko, 1951

mol%	f. t.	mol%	f. t.
0	110	40	120
10	90	50	134
20	97	60	145
25	91	70	150
27.5	89.7	80	158
30	88 E	90	167
32.5	97	100	171
35	105		

Resorcinol ($C_6H_6O_2$) + Tert.Amylphenol-p
($C_{11}H_{16}O$)

Lecat, 1949

%	b. t.
0	281.4
85	265.8 Az
100	266.5

Resorcinol ($C_6H_6O_2$) + m-Oxybenzaldehyde ($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0	115	-	55.3	64	-
10.3	106	-	56.8	66	-
20.0	96	-	63.7	71.5	-
28.2	88	-	69.3	78	59
35.1	79	59	80.0	88	-
42.8	66	"	92.7	100	-
49.1	59	"	100	105	-

Resorcinol ($C_6H_6O_2$) + Salol ($C_{13}H_{10}O_2$)

Hrynakowski and Adamanis, 1934

mol%	f. t.	E	min.
100	42	38	2.3
90.7	38	36	2.2
82.2	55	32	1.7
74.4	67	35	2.0
67.3	74	39	1.7
60.6	79	34	1.7
54.5	83	-	-
48.8	86	39	1.3
43.5	90	41	1.3
38.6	92	36	1.1
33.9	95	41	1.0
29.6	97	40	0.8
25.5	98	38	0.8
21.7	100	-	-
18.0	101.3	-	-
14.6	103.0	38	0.5
11.4	105.0	-	-
8.3	106.0	-	-
5.4	107.0	-	-
2.6	108.0	-	-
0	110	-	-

Resorcinol ($C_6H_6O_2$) + Styphnic acid ($C_6H_5O_8N_3$)

Efremov, 1931

mol%	f. t.	tr. t.	E
100	175.5	-	-
93.56	172.2	-	-
89.51	169.1	-	-
80.32	162.8	-	-
72.28	155.1	115.3	-
64.24	148.2	120.3	-
57.41	141.3	122.6	-
51.17	134.9	124.3	-
50.0	132.3	125.0	-
45.71	127.5	123.6	-
42.98	123.6	-	87.5
40.25	123.2	-	94.4
35.61	122.5	-	97.2
33.29	121.7	-	97.8
30.98	120.8	-	98.0
27.01	118.8	-	"
23.04	116.0	-	"
19.59	112.1	-	"
16.14	107.0	-	-
13.11	100.3	-	98.0
10.09	100.3	-	"
7.42	102.8	-	95.8
4.75	104.9	-	87.6
2.26	106.4	-	-
1.14	107.2	-	-
0	108.2	-	-
E: 23.5% 98.0° (1+1)			

Resorcinol ($C_6H_6O_2$) + α -Naphthol ($C_{10}H_8O$)

Lecat, 1949

%	b. t.
0	281.4
30	280.2 Az
100	288.0

Resorcinol ($C_6H_6O_2$) + β -Naphthol ($C_{10}H_8O$)

Lecat, 1949

%	b. t.
0	281.4
15	280.8 Az
100	295

Vignon, 1891

mol%	f. t.
0	110
33.33	90
50	88
66.66	100
100	122

Resorcinol ($C_6H_6O_2$) + Pyrogallol ($C_6H_6O_3$)

Brandstätter, 1950 (fig.)

%	f. t.		
	I	II	III
0	110.5	108	-
10	105	102	-
20	98	96	95
27	93	91	91 tr. t.
30	90	89	90 tr. t.
32	87	87 tr. t.	89
35.5	84	84 E	87.5
38	86	-	86 E
50	95	-	81
60	102	-	-
70	109	-	-
100	135	-	-

Resorcinol ($C_6H_6O_2$) + Orcinol ($C_7H_8O_2$)

Pushin, Lukavetzki and Rikovski, 1948

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	108	-	40	77	70
90	102	-	30	87	80
80	95	87	20	96	90
70	86	77	10	104	100
60	75	69	0	111	-
50	65	64			

Resorcinol ($C_6H_6O_2$) + Orcinol hydrate ($C_7H_{10}O_3$)

Pushin, Lukavetzki and Rikovski, 1948

mol%	f. t.	E	mol%	f. t.	E
100	57	-	50	43	31
90	53	31	40	60	"
80	48	"	30	75	"
70	42.5	"	20	88	"
60	36	"	10	100	"
55	33	"	0	111	-

Resorcinol ($C_6H_6O_2$) + m-Aminophenol (C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	%	f. t.
0	108.5	55.7	77.2
2.3	107.0	56.0	77.9
4.2	105.8	58.5	80.0
7.7	103.1	60.7	84.0
11.1	101.2	64.5	88.0
15.8	96.2	68.4	91.8
19.5	93.0	73.2	98.9
22.1	89.8	76.4	101.5
25.9	85.0	79.8	104.3
29.4	81.0	81.7	106.2
33.0	76.0	84.1	108.3
37.9	72.5	87.5	111.0
40.3	67.0	90.4	113.0
44.8	62.0	91.9	114.2
49.3	65.0	94.1	115.0
50.7	70.0	100	118.0
53.3	74.0		

Resorcinol ($C_6H_6O_2$) + p-Aminophenol (C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	%	f. t.
0	108.5	27.6	69.0
3.6	105.5	30.6	77.0
9.0	100.0	37.5	83.5
13.1	94.0	41.2	102.0
17.8	85.0	46.0	112.0
22.1	74.0	51.2	120.0
25.0	61.0		

Resorcinol ($C_6H_6O_2$) + Picric acid ($C_6H_3O_7N_3$)

Philip and Smith, 1905

%	f. t.	%	f. t.
0.0	108.8	75.7	98.9
20.3	102.1	80.4	96.6
35.4	95.8	85.0	97.8
44.8	94.7	87.2	100.8
55.7	97.9	90.2	105.2
61.4	99.65	95.0	112.6
67.6	100.3	100.0	120.25
71.1	99.8		

(1+1)

Hydroquinone ($C_6H_6O_2$) + Salicylic aldehyde
($C_7H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0.0	169.5	-	63.6	126	-
6.2	167.0	-	67.3	121	-7
20.5	160	-	72.4	115	-7
35.5	150.5	-	76.9	105	-
46.0	142	-	80.9	97	-
55.1	134	-	100.0	-7	-
59.4	131	-7			

Hydroquinone ($C_6H_6O_2$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0	169	-	56.9	117	-
9.1	165	-	63.4	106.5	-
19.1	160	-	73.0	88	88
29.6	151.5	88	81.7	94	-
38.4	142	-	90.3	100	-
51.6	126	88	100	105	-

Hydroquinone ($C_6H_6O_2$) + m-Aminophenol (C_6H_7ON)

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	%	f. t.	E
100	118.0	58.4	108.5	107.0
96.3	115.5	56.3	113.0	"
94.7	114.5	52.6	120.5	"
92.1	113.0	49.8	124.5	-
90.0	111.8	46.6	129.5	106.8
88.2	111.0	44.1	132.0	-
83.8	108.9	37.8	139.0	-
80.8	106.5	35.5	141.0	-
78.2	105.0	30.2	146.0	-
75.4	103.5	25.9	150.0	-
71.8	106.2	22.5	153.5	-
69.3	106.5	14.0	159.0	-
67.9	106.8	8.2	163.5	-
64.0	107.0	3.8	166.5	-
61.5	107.0	0	168.0	-
(1+1)				

Hydroquinone ($C_6H_6O_2$) + Styphnic acid ($C_6H_8O_8N_2$)

Efremov, 1934

mol%	I		II	
	f. t.	E	f. t.	E
100	175.5	-	-	-
93.56	172.3	-	-	-
89.51	170.2	-	-	-
80.32	160.9	-	-	-
76.30	154.5	-	-	129.9
72.28	152.2	-	-	130.8
68.26	-	-	149.1	133.8
64.24	145.4	119.6	145.2	134.0
61.51	-	-	141.6	134.4
57.41	136.5	121.6	136.9	134.6
54.29	133.2	121.5	-	134.6
54.22	131.0	121.5	136.6	134.6
51.17	128.2	121.4	136.2	134.6
48.44	-	-	137.7	134.5
45.71	122.7	-	139.2	133.9
42.98	-	-	140.0	133.8
40.25	127.5	121.5	141.1	132.9
38.39	-	-	141.7	-
35.61	134.2	121.3	142.3	-
33.29	137.6	121.4	142.6	-
30.98	141.6	121.4	142.3	-
27.01	145.3	119.6	141.5	-
23.04	148.6	119.6	-	-
19.59	152.5	116.6	-	-
16.14	155.4	109.9	-	-
10.09	160.4	-	-	-
7.42	162.6	-	-	-
4.75	164.1	-	-	-
2.26	166.4	-	-	-
1.14	167.5	-	-	-
0	168.8	-	-	-
(2+1)	142.6°			

Pyrogallol ($C_6H_6O_3$) + Salicylic aldehyde
($C_7H_6O_2$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
0.0	132	-	69.6	46.0	-8
6.9	121	-	71.5	44	-
18.3	112.5	-	77.6	35	-
29.3	103.5	-	85.1	19	-
38.9	93.0	-	85.1	19	-8
48.5	81	-8	89.3	8	-
49.4	80.4	-	95.5	-6.5	-
51.3	76	-	100.0	-7	-

Pyrogallol ($C_6H_6O_3$) + m-Oxybenzaldehyde
($C_7H_6O_2$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0.0	130	-	49.1	83	69
13.0	120	-	59.1	69	69
21.7	113.5	-	72.1	78	-
29.9	104.5	-	83.5	91	-
35.2	99	-	100.0	105	-
42.6	91	69			

Pyrogallol ($C_6H_6O_3$) + m-Aminophenol (C_6H_7ON)

Kremann, Lupfer and Zavodsky, 1920

%	f. t.	E	%	f. t.	E
100	118.0	-	43.5	86.5	-
92.6	114.5	-	40.0	92.0	-
87.4	111.5	-	36.1	97.5	-
81.3	107.5	-	35.2	98.5	-
74.1	101.0	-	33.2	100.5	-
70.6	97.0	77.5	31.0	104.0	-
68.1	95.0	-	27.2	110.0	-
64.6	91.0	-	23.6	111.0	-
59.5	85.5	-	19.1	114.5	77.0
57.0	83.0	77.0	15.1	118.0	-
54.1	80.5	"	10.7	122.0	-
51.9	77.5	"	6.4	125.0	-
49.2	79.5	"	3.0	128.0	-
46.3	83.0	"	0	129.0	-

Pyrogallol ($C_6H_6O_3$) + β -Naphthol ($C_{10}H_8O$)

Lecat, 1949

%	b. t.
0	309
22	293.5 Az
100	295.0

Cresol (C₇H₈O) o+m

Fox and Barker, 1917

%	b. t.	%	b. t.
100	191.2	45	196.7
95	191.7	40	197.3
90	192.3	35	197.9
85	192.7	30	198.5
80	193.2	25	199.2
75	193.8	20	199.7
70	194.3	15	200.3
65	194.7	10	201.0
60	195.3	5	201.7
55	195.7	0	202.3
50	196.2		

Dawson and Mountford, 1918

%	f. t.	%	f. t.
0	30.45	62.80	6.5
13.74	23.95	69.28	5.8
21.69	20.00	74.39	4.6
31.31	14.6	78.69	3.6
38.75	9.4	83.25	1.7
41.64	8.5	88.02	9.3
43.68	8.3	93.39	6.6
50.64	7.9	100	10.0
56.14	7.6		

Fox and Barker, 1918 (fig.)

%	f. t.	%	f. t.
0	30.0	60	-2
10	24	70	-4
20	18	80	-8
30	11	85	-12.5
40	+2.5 tr. t.	90	-7.5
50	0	100	+2.4

Knight, Lincoln and al., 1918

%	f. t.	d 25°
0	29.0	1.0439
10	23.85	.0428
20	18.35	.0417
30	11.85	.0402
100	3.0	.9333

Fox and Barker, 1917

%	d	%	d
15.5°			
100	1.0387	45	1.0459
95	.0393	40	.0466
90	.0400	35	.0472
85	.0407	30	.0478
80	.0413	25	.0486
75	.0420	20	.0493
70	.0427	15	.0499
65	.0433	10	.0506
60	.0440	5	.0512
55	.0446	0	.0516
50	.0453		

Kendall and Beaver, 1921

%	η	κ. 10 ⁸	%	η	κ. 10 ⁸
25°					
100	13420	1.397	49.40	9939	633
84.63	12160	1.134	36.29	9208	362
69.39	11090	0.977	23.92	8582	184
64.64	10750	0.874	11.97	8086	178
60.46	10500	0.767	0	7608	127

Scheiber, 1934

%	20.2°	η 35°	40°
0	9690	4750	4150
20	9560	5190	4330
40	10500	5750	4690
60	11090	6250	5120
80	12060	6850	5560
100	17300	7750	6220

Cresol (C_7H_8O) o+p

Dawson and Mountford, 1918

%	f. t.	%	f. t.
0	30.45	61.02	8.5
9.94	25.3	62.76	8.6
17.91	20.85	66.70	8.7
24.27	17.2	67.88	9.8
30.40	13.0	68.40	10.3
34.91	10.1	70.99	12.6
39.36	6.5	71.84	13.6
44.41	4.4	72.60	14.1
44.41	2.5	78.44	18.9
47.11	4.6	87.00	25.3
49.42	5.5	91.70	28.45
51.17	6.4	100	34.15
54.04	7.0		

(1+2)

Fox and Barker, 1918 (fig.)

%	f. t.	%	f. t.
0	30	60	+0.5
10	24	70	10
20	16	80	18
30	10	90	26
40	+2	100	36
50	-8 E		

Knight, Lincoln and al., 1918 (fig.)

%	f. t.	%	f. t.
0	29.0	25	12.8
5	25.8	30	8.05
10	23.05	90	26.8
15	20.15	100	34.4
20	16.7		

%	d	%	d
25°			
0	1.0408	25	1.0387
5	.0403	30	.0382
10	.0398	90	.0316
15	.0398	100	.0304
20	.0393		

Hill and Mosbacher, 1925

%	f. t.	%	f. t.
0	30.08	52.98	+7.65
13.99	22.20	60.17	6.40
22.03	16.41	65.91	3.70
29.64	10.27	69.69	-9.28
37.11	3.70	76.05	15.67
42.20	+2.88	84.41	22.94
50.70	-6.62	100	34.80

Hill and Davis, 1926

%	f. t.	%	f. t.
0	30.80	62.81	7.84
13.88	24.61	62.81	5.13
27.66	14.71	64.87	7.19
36.08	8.25	66.70	8.1
42.69	3.02	67.64	10.10
45.45	1.13	79.90	21.25
46.50	0	90.34	29.19
47.89	1.81	100	34.61
55.30	6.62		

(1+2)

Kendall and Beaver, 1921

%	η	$\kappa \cdot 10^8$	%	η	$\kappa \cdot 10^8$
25°					
100	14740	1.378	47.44	10300	0.410
84.53	13270	0.726	36.96	9612	.344
70.01	12000	.601	24.27	8854	.190
64.75	11630	.533	12.50	8209	.188
57.67	11030	.507	0	7608	.127

Scheiber, 1934

%	η	η	η
	20.2°	35°	40°
100	20000	8060	6500
80	16630	7120	5940
60	14250	6560	5310
40	12310	6000	4810
20	10750	5440	4380
0	9690	4750	4150

o-Cresol (C_7H_8O) + o-Bromphenol (C_6H_5OBr)

Lecat, 1949

%	b. t.
0	191.1
25	189.8 Az
100	195.0

o-Cresol (C_7H_8O) + Picric acid ($C_6H_3O_7N_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	118.5	42.0	89.1
89.1	110.5	34.1	86.7
80.9	104.1	27.5	83.3
72.7	96.5	19.9	76.9
65.5	89.1	13.5	68.9
62.0	87.4	9.2	60.8
57.7	89.0	1.6	29.4
49.7	89.8	0	30.4

(1+1)

o-Cresol (C_7H_8O) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov, 1931

mol%	f. t.	tr. t.	E
100	175.5	-	-
93.45	170.2	-	-
89.34	166.3	-	-
79.87	157.5	-	-
67.61	149.8	-	-
63.81	142.1	-	-
60.37	137.7	-	-
56.93	133.8	110.8	-
53.76	129.7	112.4	-
50.00	125.5	113.5	-
47.83	122.2	113.4	-
45.07	119.3	112.6	-
42.44	114.3	111.5	11.3
39.81	110.3	-	13.2
35.20	107.2	-	14.3
33.33	105.4	-	15.1
30.59	102.8	-	15.2
22.64	92.6	-	15.9
19.28	85.8	-	16.2
15.93	78.6	-	17.0
9.93	60.2	-	17.1
7.30	48.4	-	17.1
4.67	32.1	-	17.2
2.22	17.4	-	17.2
0	30.4	-	-

E: 17.2° 5.2wt% (1+1)

Cresol (C_7H_8O) m + p

Dawson and Mountfort, 1899

%	f. t.	%	f. t.
0	10.0	41.22	8.8
5.10	6.7	47.99	7.4
6.74	5.4	56.39	2.4
9.13	4.4	60.38	4.2
13.40	3.5	68.41	11.0
16.50	5.6	77.03	18.0
23.48	8.2	88.39	26.5
28.41	9.2	100	34.15
35.71	9.5		

Parant, 1950

Az: 27% 158.2° (200 mm)

Fox and Barker, 1917 (fig.)

%	f. t.	%	f. t.
0	+2.4	60	+4
10	4	70	16
20	4.5 sic.	80	21
30	+3	90	28
40	-1	100	36
50	-8 E		

(4+1)

Scheiber, 1933

%	20.2°	η 35°	40°
0	17300	7750	6220
20	14380	7880	6310
40	14410	7870	6250
60	14440	7880	6250
80	14750	7880	6190
100	20000	8060	6500

Kendall and Beaver, 1921

%	η	$\kappa \cdot 10^8$	%	η	$\kappa \cdot 10^8$
25°					
100	14740	1.378	37.62	13730	1.551
86.12	14500	.495	32.67	13690	.512
75.39	14320	.603	29.29	13610	.449
69.97	14250	.628	28.27	13600	.442
54.80	14000	.560	17.33	13520	.378
51.77	13930	.567	8.85	13460	.384
44.79	13850	.583	0	13420	.397

m-Cresol (C_7H_8O) + o-Ethylphenol ($C_8H_{10}O$)

Parant, 1950

Az: 50% 100 mm 137.90° 200 mm 158.00°

m-Cresol (C_7H_8O) + Xylenol-2,6 ($C_8H_{10}O$)

Parant, 1950

Az: 73% 201.15°

m-Cresol (C_7H_8O) + Picric acid ($C_6H_3O_7N_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	118.5	32.4	61.5
90.1	111.4	28.6	60.8
81.5	104.8	23.6	58.7
73.8	97.5	19.6	56.5
66.6	90.6	14.6	52.6
59.8	82.2	9.9	46.7
53.1	74.7	5.7	38.5
45.3	63.3	3.4	30.3
41.7	60.0 (2+1)	1.1	10.2
37.4	61.2	0	10.9

m-Cresol (C_7H_8O) + Styphnic acid ($C_6H_3O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	39.81	115.0	-
93.45	169	169	35.02	113.7	-
89.34	169	169	33.33	112.9	-
79.87	169	169	30.59	110.0	0.4
71.42	150.1	-	22.64	101.3	2.5
63.81	142.7	-	19.28	95.9	3.1
60.37	138.5	-	15.93	87.8	3.3
56.93	135.7	-	9.93	67.8	3.4
53.76	129.8	109.7	7.30	51.3	3.4
50.00	126.4	114.5	4.67	27.5	3.4
47.83	123.4	114.6	2.22	7.2	3.5
45.07	119.9	113.9	1.09	5.5	-
42.44	116.2	-	0	10.4	-

(1+1)

p-Cresol (C_7H_8O) + o-Ethylphenol ($C_8H_{10}O$)

Parant, 1950

Az: 50% 50 mm 120.70° 47% 100 mm 138.10°

p-Cresol (C_7H_8O) + 2,6-Xylenol ($C_8H_{10}O$)

Parant, 1950

Az: 72% 201.05°

p-Cresol (C_7H_8O) + o-Bromphenol (C_6H_5OBr)

Lecat, 1949

%	b. t.
0	201.7
20	194.0 Az
100	119.50

p-Cresol (C_7H_8O) + Picric acid ($C_6H_3O_7N_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	118.5	38.8	62.3
91.1	112.0	32.8	58.5
80.2	103.4	27.6	54.7
69.9	93.7	22.3	49.6
62.8	86.2	16.9	43.1
56.4	78.0	11.1	35.5
51.0	70.3	5.9	30.1
46.5	65.2	0	34.5
43.9	64.4	(1+1)	

p-Cresol (C_7H_8O) + Styphnic acid ($C_6H_5O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	42.44	107.1	16.5
93.45	170.1	-	39.81	105.8	19.8
89.34	166.2	-	37.36	103.9	22.5
79.87	155.7	-	33.33	101.2	22.6
71.47	147.7	97.5	30.59	98.8	25.5
63.81	135.9	107.7	22.64	88.0	26.8
60.37	131.0	110.2	19.28	81.5	27.1
56.93	126.2	110.9	15.93	73.8	27.2
53.76	122.2	110.9	9.93	59.4	27.3
50.0	115.7	111.1	7.30	48.5	27.2
47.83	111.3	-	4.67	39.3	27.3
45.07	109.2	11.3	2.22	30.2	27.5
(1+1)			0	33.8	-

m-Ethylphenol ($C_8H_{10}O$) + Mesityl ($C_9H_{12}O$)

Parant, 1950

Az: 55% 172.30° (200 mm)

p-Ethylphenol ($C_8H_{10}O$) + Mesityl ($C_9H_{12}O$)

Parant, 1950

Az: 48% 172.00° (200 mm)

2,4-Xylenol as. ($C_8H_{10}O$) + p-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b. t.
0	210.5
-	210.0 Az
100	219.75

2,3-Xylenol ($C_8H_{10}O$) + Mesityl ($C_9H_{12}O$)

Parant, 1950

Az: 38% 95.92° (10 mm)

3,4-Xylenol ($C_8H_{10}O$) + p-Isopropylphenol
($C_9H_{12}O$)

Parant, 1950

Az: 58% 106.98° (10 mm)

3,4-Xylenol ($C_8H_{10}O$) + 2-Methyl-4-Ethylphenol
($C_9H_{12}O$)

Parant, 1950

Az: 52% 227.20°

3,4-Xylenol as. ($C_8H_{10}O$) + p-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b. t.
0	226.8
89	219.0 Az
100	219.75

Thymol ($C_{10}H_{14}O$) + Ethyl salicylate ($C_9H_{10}O_3$)

Lecat, 1949

%	b. t.
100	233.8
20	234.4 Az
0	233.8

Thymol ($C_{10}H_{14}O$) + Salol ($C_{12}H_{10}O_3$)

Bellucci, 1912

%	f. t.	%	f. t.
100	42	50	23
90	34	40	29
80	26	30	34.5
70	18	20	40
60	17.5	10	46
		0	51

Thymol ($C_{10}H_{14}O$) + Salipyrine ($C_{18}H_{18}O_4N_2$)

Hrynakowski and Szmytowna, 1936

%	f. t.	E	%	f. t.	E
100	91.5	-	45	62.5	-
95	89.0	39.0	40	60.9	-
90	82.5	-	35	58.5	41.5
85	80.0	39.5	30	54.8	41.0
80	72.2	37.0	25	45.0	42.2
75	66.0	40.0	20	45.0	-
70	63.5	41.5	15	45.8	41.0
65	50.5	42.5	10	47.5	-
60	50.0	42.0	5	48.5	-
55	55.0	-	0	50.8	-
50	57.8	-			

(3+1)

Thymol ($C_{10}H_{14}O$) + Picric acid ($C_6H_3O_7N_3$)

Kendall, 1916

mol%	f. t.	mol%	f. t.
100	118.5	42.0	94.2
89.8	113.0	36.7	91.6
81.1	108.0	32.5	89.2
75.4	105.0	28.1	86.3
69.3	102.0	22.8	81.1
62.5	99.8	16.6	71.9
53.5	96.0	3.2	48.2
51.5	96.6	0	49.6
47.0	96.1		

(1+1)

Absitol ($C_9H_{12}O$) + o-Chlorphenol (C_6H_5OCl)

Lecat, 1949

%	b. t.
0	220.5
50	217.2 Az
100	219.75

Orcinol ($C_7H_8O_2$) + Picric acid ($C_6H_3O_7N_3$)

Pushin, Lukavetzki and Rikovski, 1948

mol%	f. t.	E	mol%	f. t.	E
0	108	-	60	100	-
10	100	-	70	-	96
20	-	93	72	-	"
22	94	-	75	100	"
30	97	90	80	105	95
40	101	85	90	114.5	92
50	102	-	100	122	-

(1+1)

Dimethylhydroquinone ($C_8H_{10}O_2$) +
Methylethylhydroquinone ($C_9H_{12}O_2$)

Vorländer, 1938

mol%	f. t.	E	mol%	f. t.	E
0	56	54.5	58	29	26
8	51	31	68	30.5	28
16	47.5	30.5	80	32	29
28	43	30	90	34.5	32
38	37	29.5	100	38.5	-
48	32.5	28			

Dimethylhydroquinone ($C_8H_{10}O_2$) +
Diethylhydroquinone ($C_{10}H_{14}O_2$)

Vorländer, 1938

mol%	f. t.	E	mol%	f. t.	E
0	55	-	45	46	38.5
8	53	38.5	50	50	39
16	49	"	60	55	38
26	43	"	72	60	38.5
30	41	"	82	65	"
35	38.5	"	95	71	"
36	39	"	100	75	-
40	43	"			

Methylethylhydroquinone ($C_9H_{12}O_2$) +
Diethylhydroquinone ($C_{10}H_{14}O_2$)

Vorländer, 1938

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	72	72	38	44.5	33.5
90	68	52	28	39	34
79	63	48	20	35.5	34
68	59	42	8	36.5	-
66	54	40	0	38	-
48	50	37			

Salicylic Aldehyde ($C_7H_6O_2$) + o-Nitrophenol
($C_6H_5O_2N$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.
100	-7	-	49.1	+12
84.8	-10.5	-	52.9	15
80.6	-12	-	55.8	17
75.7	-14	-	59.3	20
70.4	-5	-	61.2	21
67.1	-2	-14	71.9	28
62.4	+3	-	81.3	34
59.1	+6	-14	92.5	40
54.4	+9	-	100	44

Salicylic aldehyde ($C_7H_6O_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.
0	-7	-	41.7	41
10	-9.1	-	49.3	56
11.6	-9	-	54.4	63
14.7	-10.5	-14	60.2	70
29.1	+7	-14	72.6	85
32.3	+19	-	84.2	96
40.0	35	-14	94.2	106
			100	111

Salicylic aldehyde ($C_7H_6O_2$) + Picric acid
($C_6H_3O_7N_3$)

Kremann and Zechner, 1925

%	f. t.	E	%	f. t.	E
100	121	-	38.8	44	-
93.9	112	-	33.4	35.3	-6.5
86.0	98	-	28.8	34	-
75.7	83.5	55	26.0	29	-6.5
64.2	64.1	55	15.7	13	-
53	54.2	35	6.2	-6.5	-6.5
45.8	51	-	0.0	-7	-
43.0	48	-			
(2+1)	(1+1)				

Salicylic aldehyde ($C_7H_6O_2$) + α -Naphthol
($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	92	41.7	5
92.9	86	37.6	-18
81.6	76	33.3	-16
68.6	62	27.2	-12.5
58.0	44	20.4	-10
50.0	30.5	14.2	-9
49.1	27.5	0.0	-7

E: -20°

Salicylic aldehyde ($C_7H_6O_2$) + β -Naphthol
($C_{10}H_8O$)

Kremann and Zechner, 1925

%	f. t.	%	f. t.
100	121	45.6	58
92.1	115	40.7	50
83.2	107	36.7	40
74.2	98	30.8	29
65.7	88	26.4	19
58.2	77	22.0	4
50.5	69	0	-8

E: -11°

m-Oxybenzaldehyde ($C_7H_6O_2$) + o-Nitrophenol
($C_6H_5O_2N$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
100	44.5	-	42.0	78.5	41
93.6	42	-	30.8	86	-
83.9	48	41	21.2	92	-
75.4	54	-	11.3	98.8	-
68.4	60	-	0	105	-
61.1	65	-			

m-Oxybenzaldehyde ($C_7H_6O_2$) + p-Nitrophenol
($C_6H_5O_2N$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
100	113.5	-	47.0	71	65.8
87.4	101.5	-	39.5	78.5	65.8
78.3	92	-	29.9	87	-
71.6	86	-	22.0	98	-
65.2	80	65.8	10.8	99.5	-
60.0	75	65.8	0	105	-

m-Oxybenzaldehyde ($C_7H_6O_2$) + 2,4-Dinitrophenol
($C_6H_4O_5N_2$)

Kremann and Pogantsch, 1923

%	f. t.	%	f. t.	E
100	112	44.4	78	-
90.7	104	43.2	78	-
81.1	95	39.5	81.5	-
78.5	93.5	37.7	82	-
75.1	91	34.2	84	-
72.7	89	33.0	85	-
68.9	83	30.9	87	-
65.4	80.5	30.8	87	-
59.8	79	24.3	91	78
58.7	79	22.9	92	-
52.8	78.5	20.1	94	-
52.3	78.5	14.0	97	-
48.4	78	0.0	107	-
47.7	77.8			

(one complex)

m-Oxybenzaldehyde ($C_7H_6O_2$) + Picric acid
($C_6H_3O_7N_3$)

Kremann and Pogantsch, 1923

%	f. t.	%	f. t.
100	122	52.7	88
89.5	112	47.2	88
84.6	105	41.9	88.5
78.5	97	39.2	88
73.7	91	34.1	88
69.2	88	25.2	88
65.8	89	25.0	89
62.4	88	17.0	95
58.3	88	8.0	100.5
53.7	88	0	105
53.6	88		

Rheinboldt, 1925

%	f. t.	E	%	f. t.	E
100	122	121	40.7	89.5	86.5
86.4	108	87	33.3	90.5	86
80.8	102	"	19.9	95	86
76.0	96	"	15.2	98	86
70.0	90.5	"	9.5	100.5	86.5
60.7	90.5	86	0	105.0	100
50.3	80	86			

m-Oxybenzaldehyde ($C_7H_6O_2$) + α -Naphthol ($C_{10}H_8O$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
0	105	-	62.1	65	61.5
6.8	102	-	71.2	75	-
20.4	94.0	-	83.5	85	-
29.8	87	-	92.2	90	-
38.0	85	61.5	100	96	-
44.7	75	-			
53.1	67	61.5			

m-Oxybenzaldehyde ($C_7H_6O_2$) + β -Naphthol ($C_{10}H_8O$)

Kremann and Pogantsch, 1923

%	f. t.	E	%	f. t.	E
100.0	121	-	42.0	78	74
90.0	114	-	38.5	80	74
83.0	108	-	33.5	84	-
75.0	102	-	27.9	89	74
67.6	95	74	20.6	93	-
59.5	87	74	15.3	97	-
52.2	80.5	-	7.6	101	-
48.4	78	-	0	105	-

Vanillin ($C_8H_8O_3$) + ortho-Vanillin ($C_8H_8O_3$)

Noelting, 1910

%	f. t.	%	f. t.
0	80.0	60	33.0
10	73.9	70	29.7
20	67.8	80	33.7
30	60.0	90	38.8
40	52.0	100	43.8
50	43.1		

p-Dioxydiphenylmethane ($C_{12}H_{10}O_2$) +p-Dioxydiphenylether ($C_{12}H_{10}O_3$)

Luttringhaus, 1937 (fig.)

%	f. t.	E	%	f. t.	E
100	165.5	-	40	150.5	146
80	157.0	-	20	156	147
65	150.0	146.5	0	160	-
50	147.5	146			

Guaiacol ($C_7H_8O_2$) + Salol ($C_{13}H_{10}O_3$)

Bellucci, 1912

%	f. t.	%	f. t.
100	42	40	9
90	33	30	13.5
80	25	20	19
70	16.5	10	24.5
60	8	0	29
50	3.5		

Guaiacol ($C_7H_8O_2$) + Picric acid ($C_6H_3O_7N_3$)

Philip and Smith, 1905

%	f. t.	%	f. t.
0.0	28.1	73.6	86.45
2.1	27.25	74.5	86.2
7.8	41.65	78.6	88.7
16.8	58.85	82.7	95.9
32.2	74.8	87.8	103.2
44.5	83.0	94.4	112.6
55.1	87.1	100.0	120.25
64.8	87.9		(1+1)

Methylresorcinol ($C_7H_8O_2$) + Eugenol ($C_{10}H_{12}O_2$)

Lecat, 1949

%	b. t.	Sat t.
0	290.5	-
86	251.3 Az	166
100	254.8	-

Methylresorcinol ($C_7H_8O_2$) • Isoeugenol ($C_{10}H_{12}O_2$)

Lecat, 1949

%	b. t.
0	290.5
75	263.5 Az
100	268.8

Salol ($C_{13}H_{10}O_3$) + Betol ($C_{17}H_{12}O_3$)

Miers and Isaac, 1907

%	f. t.	%	f. t.
0	42.5	10	17.5
10	38	19.8	30
22	32.5 E	22	32.5
26	31	26	31
30	29	30	41
47.965	21.5	40.08	50
		47.97	57.5
		49.57	59
Salol		58.46	67
		69.66	75
		79.89	81
		90.99	86
		100	92
			Betol
%	t. spontan. cryst.	%	t. spontan. cryst.
100	79.0 (salol)	21.57	19.3
89.965	73.0	19.81	20.0
80.246	66.5	10.01	28.0
71.557	57.0	0	33.0
60.0	48.0		
59.2	47.0	41.1	25.0 (betol)
51.83	37.0	36.73	23.5
47.4	32.0	30.032	17.5
39.9	24.0	26.003	15.0
35	8	21.15	13
30	11.5	10	10.5

Refractive indices are additive.

Salol ($C_{13}H_{10}O_3$) + β -Naphthol ($C_{10}H_8O$)

Bianchini, 1914

mol%	f. t.	E	min.
0	42.5	-	-
10	36	34.5	100
15	34.5	-	160
20	43.5	-	130
30	60	-	110
40	73	-	100
50	85.5	-	80
60	94	-	50
70	101.5	34.5	30
80	109	-	-
85	114.5	-	-
90	119	-	-
100	122	-	-

Quercigh and Cavagnari, 1912

E: 10% 34.5°

Bellucci, 1912

%	f. t.	E	min.
0	42	-	-
5	38.5	35	4
10	34	34.3	10
20	52.5	34.8	9
30	68	34.6	8
40	80	35	6.5
50	88	34.8	5
60	97.5	34.8	3.5
70	105	34.4	2
80	111	34.6	1
90	116.5	-	-
100	121.7	-	-

Salol ($C_{13}H_{10}O_3$) + Benzonaphthol ($C_{17}H_{12}O_2$)

Angeletti, 1927

%	f. t.	E	%	f. t.	E
0	42.5	-	54.7	82	36.5
4.9	41	34	59.6	84	37
10.1	39	"	64.1	87	"
15.1	38	"	69.8	90.5	"
19.6	46	"	75.2	94	"
25	55	"	79.6	94	"
29.5	60.5	35.5	84.1	96.5	"
34.9	65.5	"	90.2	100	"
40	70	"	94.7	103	49
44.9	75	"	94.7	105	67.5
50.1	78	"	100	110	-

2-Oxychalcone ($C_{15}H_{12}O_2$) + Picric acid ($C_6H_3O_7N_3$)

Asahina, 1934

mol%	f. t.	mol%	f. t.
100.0	122.0	49.4	127.5
94.9	118.0	44.4	125.8
89.8	120.5	40.0	-
79.6	128.4	34.6	120.0
75.5	129.3	29.0	115.0
69.5	129.5	19.7	103.5
64.5	130.0	10.2	85.0
62.0	130.5	5.8	85.8
59.4	131.0	0.0	89.0
54.5	129.0	-	-
E: 92.5 mol% 113.0° 9.5 mol% 82.0°			

4-Oxychalcone ($C_{15}H_{12}O_2$) + Picric acid ($C_6H_3O_7N_3$)

Asahina, 1934

mol%	f. t.	mol%	f. t.
100.0	122.0	54.5	157.0
97.5	119.5	50.0	157.5
93.5	134.3	44.7	156.4
89.8	139.5	39.5	156.2
83.4	145.3	35.7	155.0
79.0	148.0	32.0	158.0
74.6	151.3	29.9	159.5
69.5	153.0	25.5	164.5
67.0	154.0	11.9	170.8
64.5	155.0	0.0	175.5
59.5	156.8	-	-
E: 97.5 mol% 119° 37.5 mol% 149.5°			

3,4-Methylenedioxychalcone ($C_{16}H_{12}O_3$) + Picric acid ($C_6H_3O_7N_3$)

Asahina, 1934

%	f. t.	E	%	f. t.	E
100	122.0	-	59.4	128.0	104.5
97.3	120.0	113.5	47.5	125.3	105.0
95.2	116.5	"	35.9	117.5	104.0
90.0	119.8	"	30.0	111.0	104.0
85.8	123.0	"	20.0	110.0	104.3
78.7	126.5	"	15.0	113.5	103.5
75.3	127.2	"	10.0	116.5	104.0
75.0	127.3	113.0	5.0	119.0	104.5
65.9	128.5	114.5	0.0	121.0	-
(1+2)					

Methylenedioxychalcone ($C_{16}H_{12}O_3$) + β -Naphthol
($C_{10}H_8O$)

Asahina, 1934

mol%	f. t.	E	mol%	f. t.	E
100	121.5	-	30	95.5	71.0
89.6	116.5	72	25	100.5	71.5
80	111.5	72	20	106.6	71.0
70	104.5	71	15	110.8	72.0
60	95.5	72	10	114.5	71.5
50	93.8	71	5	118.4	72.0
40	80.0	71	0	121.0	-

Naphthol ($C_{10}H_8O$) α + β

Vignon, 1891

%	f. t.
0	92
33.3	71
50	82
66.7	98
100	122

Crompton and Whiteley, 1895

mol%	f. t.	mol%	f. t.
100	122.2	40	75.8
90	116.5	30	79.1
80	109.5	20	85.1
70	102.7	6.1	89.1
60	93.9	0	95.5
50	85.1		

Kofler and Brandstätter, 1943

%	f. t.	%	f. t.
I	II	I	II
0	96	50	87
10	91	70	103
30	79	90	116
40	76	100	122

Chlorphenol (C_6H_5OCl) o + p

Rinkes, 1911

%	f. t.	E	%	f. t.	E
0	+8.8	-	59.6	+7.8	-21.0
6.3	+4.8	-	66.4	15.0	-
14.4	-0.6	-	74.0	22.1	-
26.7	-9.8	-	84.1	31.0	-
34.4	-16.7	-21.0	88.8	34.9	-
44.6	-	-20.0	94.7	38.9	-
47.3	-8.9	-20.2	100	42.9	-
54.9	+2.7	-20.2			

Bromphenol (C_6H_5OBr) o + p

Rinkes, 1911

%	f. t.	E	%	f. t.
0	+5.5	-	44.2	16.2
3.8	+3.3	-	55.0	27.8
10.6	-0.4	-	63.5	36.2
16.8	-4.6	-	71.3	42.7
24.0	-9.6	-11.6	81.8	50.6
25.8	-10.6	-11.7	85.3	53.1
30.4	-6.4	-	90.6	57.4
34.5	+0.9	-	100	63.5
39.4	+8.5	-		

Iodphenol (C_6H_5OI) o + p

Rinkes, 1911

%	f. t.	E	%	f. t.
0	40.4	-	50.2	55.2
7.3	37.2	-	59.1	63.7
16.1	32.6	-	65.4	69.2
32.0	30.4	26.1	76.0	77.2
37.4	39.0	"	91.1	87.0
43.2	46.8	"	100	92.0

Trichlorphenol sym. ($C_6H_3OCl_3$) +Tribromphenol sym. ($C_6H_3OBr_3$)

Würfel and Küster, 1904 and Küster, 1904

mol%	f. t.	mol%	f. t.
metastable			
0.00	25.37	39.76	22.60
1.49	24.94	41.54	23.57
2.98	24.57	48.25	26.88
5.75	23.83	57.59	31.17
10.78	22.83	71.39	37.14
19.38	20.55	83.33	42.00
29.54	18.45	93.85	47.19
34.49	20.20	100.00	50.00

sym. Trichlorphenol ($C_6H_3OCl_3$)+ Styphnic acid ($C_6H_3O_3N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	34.96	123.4	60.0
93.87	170.3	-	25.75	110.7	60.0
87.89	165.1	55.0	21.26	101.3	60.0
82.11	161.7	57.7	16.78	91.2	60.0
76.33	157.6	58.2	12.49	79.8	61.0
65.29	150.7	59.2	8.21	64.2	61.0
54.74	143.2	59.7	3.99	63.0	53.3
50.64	140.4	60.0	2.02	65.1	-
44.63	133.7	60.0	0	67.3	-

E : 8.2 wt% 60.0°

Tribromphenol sym. ($C_6H_3OBr_3$) +Acetyltribromphenol ($C_8H_5O_2Br_3$)

Boeseken, 1912

mol%	f. t.	mol%	f. t.
stable			
0	92.5	55.9	63.9
4.5	88.6	59.6	62.7
9.0	84.5	63.9	59.3
18.3	75.9	68.9	57.1
22.8	71.2	74.7	63.9
32.8	60.0	81.7	69.6
38.1	60.7	89.9	75.6
42.3	62.4	100	72.0
46.9	64.5		

Aminophenol (C_6H_7ON) o + m

Hrynakowski and Szmyt, 1936

%	f. t.	%	f. t.
0	173.3	60	138
10	171	70	128
20	167	80	114
30	161	82	110.7 E
40	155	90	119
50	148	100	123.0

Aminophenol (C_6H_7ON) o + p

Hrynakowski and Szmyt, 1936

%	f. t.	%	f. t.
0	173.3	50	155
10	171	60	162
20	166.5	70	170
30	161	80	176.5
40	152	90	183
44	146.8 E	100	184.2

Aminophenol (C_6H_7ON) m + p

Hrynakowski and Szmyt, 1936

%	f. t.	%	f. t.
0	123.0	50	155
10	113	60	162
13	111.8 E	70	168
20	122	80	178
29	125.4 tr. t.	90	183
30	129	100	184.2
40	142		

m-Aminophenol (C_6H_7ON) + o-Nitrophenol

Kremann, Lupfer and Zawodsky, 1920

%	f. t.	E
0	118.0	-
17.1	112.0	-
25.9	109.8	43-43.5
33.5	107.0	"
36.9	105.5	"
33.5	107.0	"
39.8	104.5	"
45.0	103.0	43
47.2	102.5	-
54.4	100.5	43
59.5	98.0	-
63.7	97.0	43-43.5
68.4	95.5	"
73.1	93.0	-

77.5	89.0	43.5	45.3	93.0	-	77.7	75.0	-
82.4	83.0	"	47.1	92.0	69.0	79.9	77.5	-
88.9	72.0	"	49.2	89.8	-	83.3	80.0	-
93.6	62.5	"	50.5	95.5	-	86.4	82.6	-
97.8	43.5	"	52.6	86.0	-	88.8	84.7	-
100.0	44.5	-	54.0	84.5	-	90.4	86.0	-
						92.2	87.5	-
						95.3	89.5	-
						100	92.0	-
m-Aminophenol (C ₆ H ₇ ON) + m-Nitrophenol (C ₆ H ₅ O ₃ N)								
Kremann, Lupfer and Zawodsky, 1920								
%	f. t.	E	%	f. t.				
0	118.5	-	76.7	75.5				
2.7	117.5	-	81.2	79.5				
10.2	114.3	-	84.0	82.5				
25.9	106.0	-	85.9	83.8				
37.4	97.5	-	88.5	85.6				
41.1	94.5	-	90.0	87.0				
44.9	91.0	-	91.6	88.2				
50.9	84.4	-	93.4	90.0				
58.4	76.0	-	95.8	91.8				
65.9	66.0	66.0	97.4	93.0				
71.2	70.0	"	100	94.5				
m-Aminophenol (C ₆ H ₇ ON) + p-Nitrophenol (C ₆ H ₅ O ₃ N)								
Kremann, Lupfer and Zawodsky, 1920								
%	f. t.	E	%	f. t.				
0	118.0	-	58.2	85.0				
4.6	116.0	-	58.4	84.8				
11.1	113.0	-	61.6	84.3				
16.6	109.8	-	64.7	83.0				
21.3	107.5	-	66.2	82.5				
28.9	103.0	71.0	69.9	81.0				
34.4	99.0	-	72.8	83.2				
37.7	96.0	72.0	76.3	87.5				
42.0	93.0	-	80.6	91.5				
44.8	90.0	-	84.5	95.0				
47.5	88.0	-	87.9	98.5				
49.8	85.0	-	92.2	103.0				
51.3	82.5	-	96.1	107.0				
54.2	81.0	-	100	111.5				
56.0	85.0	-						
			(1+1)					
m-Aminophenol (C ₆ H ₇ ON) + α-Naphthol (C ₁₀ H ₈ O)								
Kremann, Lupfer and Zawodsky, 1920								
%	f. t.	E	%	f. t.				
0	118.0	-	54.0	99.0				
4.7	116.0	-	58.3	"				
9.1	114.5	-	61.6	98.7				
13.5	112.6	-	66.0	97.9				
17.9	110.8	-	69.5	96.8				
22.2	108.8	-	74.0	96.0				
27.4	106.2	-	76.4	98.0				
29.7	105.2	-	81.9	103.0				
31.6	104.0	-	84.2	105.5				
33.8	103.5	-	85.5	105.8				
36.4	100.0	-	88.6	109.8				
38.6	99.0	-	93.6	114.8				
44.1	97.8	-	100	121.5				
47.9	98.0	-						
51.2	98.8	-	(1+1)					
p-Aminophenol (C ₆ H ₇ ON) + α-Naphthol (C ₁₀ H ₈ O)								
Kremann, Lupfer and Zawodsky, 1920								
%	f. t.	E	%	f. t.				
62.1	147.0	-	82.0	88.5	84.3			
69.1	135.0	-	82.0	91.5	86.5			
73.9	123.0	-	82.5	94.5	89.0			
77.7	111.0	-	82.5	96.5	90.5			
82.0	99.0	-	82.5	100	92.5			
85.8	83.0	-	-					
p-Aminophenol (C ₆ H ₇ ON) + β-Naphthol (C ₁₀ H ₈ O)								
Kremann, Lupfer and Zawodsky, 1920								
%	f. t.	E	%	f. t.	E			
43.0	160.0	-	76.4	117.0	106.0			
47.6	156.0	-	81.0	109.0	106.0			
52.3	152.0	-	84.9	107.0	-			
59.8	142.0	-	90.8	113.0	-			
65.8	133.0	-	100	121.5	-			
71.6	126.0	-						

Nitrophenol ($C_6H_5O_3N$) o + m

Carrick, 1922

%	f. t.	E	%	f. t.	E
100	93	-	47.3	54.2	31.5
90.9	88.8	-	44.5	50.2	-
83.3	83.9	-	49.2	46.8	31.7
76.9	79.2	-	37.5	40.4	31.5
79.4	75.4	-	33.4	35.2	"
66.7	72.3	31.5	28.6	31.6	"
62.5	68.6	"	23.1	33.5	-
58.8	65.1	-	16.7	35.9	31.5
55.5	62.7	31.6	9.1	39.1	"
50.0	57.1	-	0	44	-

Nitrophenol ($C_6H_5O_3N$) o + p

Carrick, 1922

%	f. t.	E	%	f. t.	E
0	44	-	44.5	61.3	34.5
9.1	40.2	-	50.0	67.5	34.2
16.7	37.5	34.6	55.6	73.6	34.4
20.0	36.5	"	62.5	80.3	34.5
23.0	34.7	"	66.7	84.1	34.4
25.0	34.7	34.7	71.4	89.0	-
27.0	35.9	34.5	76.9	94.0	-
33.3	44.5	34.7	83.9	99.7	-
37.5	51.4	34.5	90.9	106.0	-
41.2	56.7	"	100.0	114.0	-

Sorum and Durand, 1952

%	f. t.
0	45.0
E	34.5
100	114.0

o-Nitrophenol ($C_6H_5O_3N$) + 2,4-Dinitrophenol
($C_6H_3O_5N_2$)

Crompton and Whiteley, 1895

mol%	f. t.	mol%	f. t.
0	46.2	60	89.7
10	41.0	65	90.9
15	38.6	70	96.4
20	40.0	75	100.9
25	51.6	80	105.2
30	55.8	90	108.8
38.64	64.8	100	112.5
50	82.3		

o-Nitrophenol ($C_6H_5NO_3$) + Picric acid ($C_6H_3O_7N_3$)

Kremann and Rodinis, 1906

%	f. t.	%	f. t.
0	45.5	45.8	55.3
7.3	43.0	48.1	57.3
11.7	41.5	56.1	69.0
19.6	39.0	63.5	87.3
27.1	36.0	64.6	79.0
32.8	34.5	80.5	97.5
36.9	40.0	86.9	105.5
40.1	45.5	100	120.0
44.5	52.5		

o-Nitrophenol ($C_6H_5O_3N$) + Styphnic acid
($C_6H_5O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	36.20	102.8	37.2
94.83	169.2	-	27.45	86.6	"
91.52	165.8	31.4	23.50	76.3	"
83.62	157.5	34.3	19.56	64.6	38.5
76.49	149.5	37.2	12.50	44.9	38.0
69.36	142.7	37.2	9.21	38.8	-
57.02	128.5	36.5	5.93	40.9	-
50.00	122.7	37.2	2.72	42.8	37.0
45.98	117.1	37.2	1.44	44.0	-
			0	44.9	-

E: 16.5 wt% 37.2°

o-Nitrophenol ($C_6H_5O_3N$) + p-Chlorphenol
(C_6H_5OCl)

Lecat, 1949

%	b. t.
0	217.2
7	217.05 Az
100	219.75

Nitrophenol ($C_6H_5O_3N$) m + p

Carrick, 1922

%	f. t.	E	%	f. t.	E
0	93	-	47.3	61.6	61.0
9.1	87.1	-	50.0	66.3	60.8
14.7	82.6	-	54.5	70.5	60.3
23.1	77.1	60.3	60.0	77.8	60.5
28.6	74.1	60.1	66.6	82.7	-
33.3	70.4	60.3	75.0	91.6	-
37.5	67.1	60.6	85.7	101.6	-
42.9	62.4	61.0	100	114	-

m-Nitrophenol ($C_6H_5O_3N$) + Picric acid
($C_6H_3O_7N_3$)

Kremann and Rodinis, 1906

%	f. t.	%	f. t.
0	94.5	58.7	74.3
12.0	91.3	64.5	81.5
24.5	86.3	73.7	91.5
36.0	81.0	81.3	99.5
40.5	79.0	88.2	106.0
46.6	76.5	95.0	114.5
53.6	72.8	100.0	120.0
55.6	71.0		

m-Nitrophenol ($C_6H_5O_3N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	31.82	116.5	83.8
94.83	172.5	-	27.45	107.8	83.8
91.52	170.6	-	23.50	98.5	83.8
83.62	166.0	-	19.56	91.5	84.0
69.36	157.1	84.0	16.03	87.6	83.8
57.02	143.2	83.8	12.50	89.1	83.8
49.14	139.2	84.2	9.21	90.4	-
45.98	134.8	83.8	5.93	92.4	-
41.09	129.9	83.8	2.72	94.3	-
36.20	122.7	83.8	0	95.3	-

E: 27.2 wt% 83.8°

p-Nitrophenol ($C_6H_5O_3N$) + Picric acid
($C_6H_3O_7N_3$)

Kremann and Rodinis, 1906

%	f. t.	%	f. t.
0.0	113.0	57.3	81.0
3.3	112.0	60.6	79.0
13.1	107.0	63.3	81.5
20.9	103.0	65.7	83.0
29.3	98.0	69.5	87.0
39.3	92.5	72.8	90.5
44.1	89.8	79.4	97.8
50.0	85.5	87.4	107.0
52.0	84.7	94.0	113.5
53.2	83.4	100.0	120.0
54.2	82.8		

p-Nitrophenol ($C_6H_5O_3N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1931

mol%	f. t.	tr. t.	E
100	175.5	-	-
94.83	169.6	-	-
91.52	166.4	100.3	-
83.62	158.3	111.7	-
76.49	150.3	112.2	-
69.36	143.6	112.8	-
63.19	137.3	113.9	-
57.02	131.3	113.2	-
50.90	125.7	113.8	-
45.98	121.2	113.5	-
41.09	116.0	-	-
36.20	114.4	-	98.0
31.82	114.2	-	99.3
27.45	112.8	-	96.6
23.50	111.4	-	99.6
19.56	108.9	-	99.6
12.50	103.5	-	99.3
9.21	99.9	-	-
5.93	103.8	-	-
2.72	109.5	-	-
1.44	111.9	-	-
0	113.8	-	-

E: 13.8 wt% 99.6°

2,4-Dinitrophenol ($C_6H_4O_5N_2$) + Picric acid
($C_6H_3O_7N_3$)

Campbell and Pritchard, 1947

%	f. t.	E	%	f. t.	E
0.0	111.5	109.9	60.0	82.0	-
10.0	108.0	73.7	60.5	82.5	74.4
20.9	103.2	74.8	61.5	83.7	75.4
33.4	95.6	75.0	69.6	93.4	74.2
39.6	92.7	72.5	80.2	105.5	72.5
40.4	91.6	76.2	88.5	111.5	72.3
51.1	86.7	73.1	100.0	121.0	119.0

E: 59% 74° (by optical observation)

by thermalanalyse E: 56.5% 79.3°

%	f. t.	E	%	f. t.	E
0.0	111.9	-	55.0	-	79.2
10.0	107.3	-	60.0	80.8	79.0
20.0	102.0	-	70.0	92.5	79.1
30.0	95.9	78.4	80.0	102.4	-
40.0	88.0	78.5	90.0	111.7	-
40.0	90.2	79.3	100.0	120.7	-
50.0	81.0	78.6			
50.0	80.9	78.8			

t velocity of crystallization (mm/min.)

60 %

70	1.28
60	2.05
50	1.89
40	1.02
30	0.47
20	0.14
13	0.075

55 %

70	0.09
60	0.37
50	0.54
40	0.43
30	0.23
21	0.09

%	d	%	d
---	---	---	---

130°

0.00	1.45	47.20	1.51
6.49	.46	61.60	.53
14.63	.46	74.06	.56
19.92	.47	81.50	.57
26.50	.48	91.55	.60
40.36	.50	100.00	.61

90°

60	1.58	55	1.54
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%	mol %	η
---	-------	--------

130°

0	0	2670
10.0	8.19	2930
20.0	16.72	3220
30.0	25.62	3710
40.0	34.90	4250
50.0	44.54	4850
60.0	54.64	5730
70.0	65.21	6740
80.0	76.20	8040
90.0	87.80	9680
100.0	100.00	11780

90°

60	-	17960
55	-	15140

2,4-Dinitrophenol ($C_6H_4O_5N_2$) + Styphnic acid
($C_6H_5O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	38.12	106.3	74.5
93.45	170.1	-	33.36	97.8	74.3
87.06	165.5	70.0	28.85	88.4	74.3
75.03	153.5	73.0	24.35	77.7	-
63.67	141.7	74.3	20.08	80.4	74.4
58.32	135.7	74.2	15.81	87.4	74.4
52.98	129.2	74.3	7.74	100.7	72.3
50.00	126.6	74.3	3.73	106.8	-
42.89	116.1	74.3	0	111.4	-

E : 28.5 wt% 74.4°

Picric acid ($C_6H_3O_7N_3$) + Styphnic acid
($C_6H_5O_8N_3$)

Efremov, 1931

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	175.5	-	43.35	119.6	113.7
96.80	169.3	166.6	38.39	115.7	110.2
94.67	165.6	162.7	28.54	106.3	103.7
89.38	159.9	156.1	23.77	103.0	-
84.14	155.0	151.4	19.01	103.6	103.1
78.90	151.2	145.8	14.04	104.8	103.6
68.56	143.0	137.0	9.08	118.2	104.7
58.37	133.6	127.1	4.60	113.9	110.2
53.34	127.9	122.6	2.34	117.7	115.0
50.0	126.1	120.3	0	122.4	-
48.31	124.0	117.6			

Picric acid ($C_6H_3O_7N_3$) + Trinitroresol
($C_7H_5O_7N_3$)

Efremov and Tikhomirova, 1927

%	f. t.	E	%	f. t.	E
100	101.2	-	45	74.0	52.0
95	97.1	43.2	40	80.2	51.8
90	92.2	47.3	35	86.7	51.5
85	86.8	50.1	30	92.5	49.8
80	79.6	50.8	25	98.6	49.6
75	71.7	51.7	20	104.8	48.6
70	64.2	52.0	15	110.7	47.5
65	56.6	52.5	10	115.2	44.7
60	55.4	52.5	5	119.5	-
55	61.3	52.4	0	122.4	-
50	67.5	52.0 E			

Picric acid ($C_6H_3O_7N_3$) + β -Naphthol ($C_{10}H_8O$)

Kuriloff, 1897

mol%	f. t.	mol%	f. t.
0	122.2	50.0	157.0
4.4	117.0	50.1	157.9
13.6	118.0	64.8	150.8
14.6	120.2	76.9	136.4
29.8	146.0	87.6	127.0
37.1	151.0	95.13	117.9
48.6	156.4	100	121.0

(1+1)

Asahina, 1934

%	f. t.	m. t.	%	f. t.	m. t.
100	121.5	-	40	156.3	135.0
90	117.0	109.0	30	154.0	109.5
80	115.2	109.2	20	142.5	109.2
70	133.5	109.3	10	121.5	109.0
60	145.5	108.0	0	122.0	-
50	153.0	111.0			

(1+1)

3-Nitropyrocatechol ($C_6H_5O_4N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	34.21	106.8	76.4
92.33	169.3	-	29.67	100.3	76.3
85.06	164.0	57.5	25.50	94.2	76.4
78.37	157.3	68.2	21.33	88.0	76.4
71.68	150.4	73.1	17.49	81.0	76.4
65.65	144.2	73.9	13.66	76.8	-
59.62	137.8	74.5	10.11	79.0	76.4
54.15	131.8	75.2	6.57	81.3	75.5
48.69	125.4	75.8	3.16	83.9	73.5
43.72	119.2	76.2	0	85.8	-
38.75	113.0	76.4			

E : 20.6 wt% 76.4°

4-Nitropyrocatechol ($C_6H_5O_4N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	34.21	118.8	-
92.33	171.2	100.5	29.67	123.3	117.3
85.06	165.9	107.7	25.50	129.5	117.3
78.37	160.5	114.5	21.33	136.0	117.0
71.68	155.4	115.9	17.49	142.0	116.7
65.65	150.5	116.8	13.66	148.0	116.2
59.62	145.5	117.0	10.11	153.3	115.4
54.15	140.4	117.3	6.57	158.3	111.6
48.69	135.4	117.3	3.16	163.3	105.2
43.72	130.0	117.3	0	167.8	-
38.75	124.5	117.3			

E: 44.2 wt% 117.3°

2-Nitroresorcinol ($C_6H_5O_4N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	29.67	105.8	75.4
95.34	170.4	-	21.33	89.7	75.4
92.33	166.5	-	17.49	84.2	75.6
85.06	159.0	68.7	13.66	77.1	75.6
78.37	154.7	72.1	10.11	76.7	75.5
71.68	151.3	72.9	6.57	79.2	-
59.62	138.8	73.5	3.16	82.7	-
48.69	127.2	85.4	1.60	83.7	-
38.75	116.0	75.2	0	84.8	-

E: 18.3 wt% 75.4°

4-Nitroresorcinol ($C_6H_5O_4N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	29.67	88.6	76.1
95.34	170.4	-	25.50	82.8	76.0
92.33	166.9	-	21.33	77.3	-
85.06	159.6	-	17.49	83.2	76.1
78.37	152.2	70.3	13.66	89.8	75.2
71.68	145.8	70.7	6.57	101.0	-
59.62	132.6	76.2	3.16	106.2	-
48.69	117.8	76.1	1.60	108.8	-
38.75	102.6	76.1	0	112.2	-

E : 30.5 wt % 76.1°

2,4-Dinitroresorcinol ($C_6H_4O_6N_2$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	40.10	112.2	105.1
93.95	170.3	-	35.24	106.1	105.0
88.02	165.7	-	30.58	109.3	105.0
82.29	159.9	87.2	25.92	115.0	104.9
76.56	154.8	96.4	21.43	120.3	103.3
71.07	149.1	102.9	16.95	125.3	100.8
65.58	143.2	104.2	12.63	130.4	95.0
60.31	137.7	104.8	8.32	135.2	-
55.05	131.8	105.0	4.04	139.6	-
50.0	125.0	105.0	0	142.7	-
44.95	118.7	105.1			
E: 39.0 wt%		105.0°			

4,6-Dinitroresorcinol ($C_6H_4O_6N_2$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1931

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	71.07	147.4	-
96.35	172.4	-	65.58	152.6	147.2
93.95	169.4	-	60.31	158.5	147.2
88.02	163.7	-	55.05	164.8	147.4
82.29	158.0	-	44.95	176.4	147.2
76.56	152.4	147.2	35.24	187.4	146.9

Nitrohydroquinone ($C_6H_5O_4N$) + Styphnic acid
($C_6H_3O_8N_3$)

Efremov, 1934

mol%	f. t.	E	mol%	f. t.	E
100	175.5	-	34.21	106.5	90.2
92.33	170.8	73.3	29.67	98.6	90.2
85.06	165.0	82.8	25.50	90.2	-
78.37	159.3	87.4	21.33	96.8	90.2
71.68	153.0	88.6	17.49	103.0	90.1
65.65	147.3	90.0	13.66	109.7	89.8
59.62	140.7	90.2	10.11	115.5	88.7
54.15	135.7	90.2	6.57	121.5	86.1
48.69	128.0	90.2	3.16	127.2	82.2
43.72	120.8	90.2	0	132.0	-
38.75	113.7	90.2			
34.8 wt%		90.2°			

Styphnic acid ($C_6H_3O_8N_3$) + α -Naphthol ($C_{10}H_8O$)

Efremov, 1934

f. t. = 120° (1+1)

Styphnic acid ($C_6H_3O_8N_3$) + β -Naphthol ($C_{10}H_8O$)

Efremov, 1931

mol %	f. t.	E
0	175.5	-
5.0	168.9	-
8.22	163.7	-
15.91	151.1	143.3
22.88	147.6	144.0
29.84	153.0	144.0
36.00	158.4	144.2
42.16	162.5	-
47.65	165.4	-
50.00	166.3	-
53.14	166.1	-
58.06	166.0	-
62.98	161.0	109.6
66.64	157.3	112.3
71.84	152.9	112.8
79.87	140.2	113.5
87.19	128.5	113.5
93.83	116.5	113.0
97.04	116.3	-
98.52	118.4	108.6
100	121.8	-
E : 113.5°		92.0 % f. t. = 144.2°(1+1)

Styphnic acid ($C_6H_3O_8N_3$) + Trinitrocresol
($C_6H_3O_7N_3$)

Efremov, 1931

%	f. t.	E	%	f. t.	E
100	175.5	-	40.0	114.3	68.8
95.0	170.1	-	30.0	105.9	68.8
90.0	163.2	-	20.0	92.4	68.0
85.0	158.6	-	15.0	79.2	69.2
80.0	153.2	-	10.0	72.2	67.0
70.0	144.4	-	5.0	86.6	66.3
65.0	138.2	56.8	2.5	93.9	-
60.0	133.3	60.8	0	101.2	-
50.0	123.8	63.2			
E: 88.3 wt%		68.8°			

FORMIC ACID + ACETIC ACID

1183

XXXIX. TWO ACIDS .

Formic acid (CH_2O_2) + Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$)

Alpert and Elving, 1949

b. t.	mol%		b. t.	mol%	
	L	V		L	V
100.8	0	0	109.7	63.9	56.5
101.0	4.5	2.7	111.1	72.3	63.8
101.1	5.7	3.2	112.3	77.1	70.5
101.5	10.8	9.1	114.1	84.9	79.9
102.7	20.2	16.6	114.7	87.3	83.3
103.8	27.3	23.0	116.0	94.7	89.9
105.1	35.8	30.1	117.0	98.6	98.6
106.1	42.8	36.6	117.5	99.3	99.8
106.7	48.9	40.4	118.1	100	100
108.3	55.5	47.5			

Jones and Murray, 1903

%	f. t.	%	f. t.
1.09	+6.52	72.47	-6.04
2.88	5.73	77.36	-2.90
3.81	5.35	81.23	+1.26
5.01	4.84	83.28	2.97
6.17	4.33	85.64	4.95
6.94	4.02	87.70	6.57
10.26	2.55	89.98	8.40
14.39	1.71	91.52	9.66
23.59	-3.97	92.96	10.84
23.93	-4.16	94.70	12.24
35.50	-11.19	96.34	13.57
		100	16.50

Baud, 1913

mol%	f. t.	mol%	f. t.
100	16.70	45.3	-21.60
91.6	13.60	33.2	-11.50
85.1	7.52	24.9	-6.10
75.0	0.65	14.2	+0.62
66.1	-6.10	6.2	4.95
57.0	-13.65	0.0	8.40

Kremann, Meingast and Gugl, 1914

mol%	d	
100	1.0716	(1 - 0.001026 t)
95	.0807	(1 - 0.001020 t)
75	.1063	(1 - 0.001040 t)
50	.1435	(1 - 0.001030 t)
25	.1874	(1 - 0.001002 t)
0	.2452	(1 - 0.001001 t)

mol% Dv for 100 cc

	20°	70°
25	-0.04	-0.05
50	-0.10	-0.07
75	-0.13	-0.10

mol% τ

100	0.001100
95	.001102
75	.001150
50	.001181
25	.001187
0	.001247

Kremann and Meingast, 1914

t	d	t	d
100 mol%		50 mol%	
15.2	1.0550	12.0	1.1300
25.5	.0437	20.3	.1192
36.0	.0320	25.3	.1132
46.7	.0202	42.3	.09375
55.8	.0106	59.5	.0732
65.0	.0004	75.5	.0544
75.4	0.9890		
95 mol%		25 mol%	
13.0	1.0662		
20.8	.0547	14.0	1.1705
25.4	.0528	20.5	.1627
54.3	.0208	50.5	.1270
		62.0	.1135
75 mol%		0 mol%	
10.2	1.0942		
21.0	.0820		
25.5	.0769	13.0	1.2300
41.9	.0586	21.0	.2190
56.9	.0405	25.0	.2138
67.0	.0290	35.0	.2014
		46.3	.1872
		55.1	.1762
		65.5	.1636
		75.0	.1520

Kremann, Gugl and Meingast, 1914

mol%	d	
	11°	77°
100	1.060	0.987
68.7	.107	1.028
50	.131	.053
22.7	.185	.10
0	.231	.15

Udovenko and Ayrapetova, 1947

mol%	d		
	0°	25°	50°
0	1.2375	1.2088	1.1846
4.22	.2309	.2007	.1728
11.36	.2113	.1847	.1577
25.84	.1824	.1578	.1284
38.70	.1577	.1297	.1033
58.35	.1258	.1016	.0758
76.37	.0972	.0756	.0455
93.97	.0746	.0518	.0240
100.00	-	.0445	.0222

Kremann, Gugl and Meingast, 1914

mol%	η (water=1)	
	11°	77°
100	1.989	1.51
68.7	.88	.48
50	.81	.47
22.7	.76	.465
0	.684	.46

Davis and Jones, 1915 and Jones, 1915

%	η		%	η	
	15°	25°		15°	25°
100	1410	1174	40	1934	1587
90	1558	1296	30	2012	1667
80	1701	1391	20	2002	1607
70	1792	1463	10	1967	1532
60	1893	1506	0	1963	1571
50	1942	1564			

Udovenko and Ayrapetova, 1947

mol%	η		
	0°	25°	50°
0	2821.0	1537.2	976.7
4.22	2906.9	1560.3	977.5
11.36	2864.4	1565.2	939.3
25.84	2855.7	1565.4	934.7
38.70	2745.0	1520.5	969.4
58.35	2502.5	1424.7	922.6
76.37	2165.3	1277.9	852.6
93.97	1179.8	1118.6	772.9
100.00	-	1035.8	762.8

Kremann and Meingast, 1914

t	σ	t	σ
100 mol%		50 mol%	
15.2	28.08	12.0	31.95
25.5	27.50	20.3	31.19
36.0	26.49	25.3	30.63
46.7	25.65	42.3	23.91
55.8	25.01	59.5	27.54
65.0	24.21	75.5	26.30
75.4	23.26		
95 mol%		25 mol%	
13.0	28.97	14.0	34.19
20.8	28.32	20.5	33.18
25.4	27.77	25.0	32.81
54.3	25.17	50.5	30.60
		62.0	29.11
		69.0	28.07
75 mol%		0 mol%	
10.2	29.98		
21.0	29.28		
25.5	28.67		
41.9	27.35	21.0	37.63
56.9	26.06	25.0	37.19
67.0	25.01	35.0	35.86
		46.3	35.16
		55.1	34.09
		65.5	32.42
		75.0	31.49

Udovenko and Ayrapetova, 1947

mol%	κ		
	0°	25°	50°
0	0.74	1.24	1.76
4.22	.65	1.11	.59
11.36	.47	0.82	.20
25.84	.26	.47	0.71
31.75	.13	.33	.54
38.70	.12	.21	.35
39.57	.11	.16	.34
50.37	.09	.13	.26
53.35	.07	.06	.20
76.37	.03	.005	.09
93.97	.0018	.0013	.01
100.00	-	-	.0038

Kremann, Meingast and Gugl, 1914

50 mol% $U=0.502$ $Q_{\text{mix } 16^\circ}=1.355 \text{ cal/g}$

Formic acid (CH_2O_2) + Propionic acid ($\text{C}_3\text{H}_6\text{O}_2$)							
Timmermans, 1958							
%	f. t.	E		%	n_D	%	n_D
				20°			
0	+ 8.3	-		0	1.3720	60	1.3800
26.6	- 2.0	-		10	.3733	70	.3810
45.6	-24.5	-37		20	.3735	80	.3830
71.9	-25.0	-36		30	.3750	90	.3845
100	-20.8	-		40	.3765	100	.3860
50				50	.3778		
Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$) + Propionic acid ($\text{C}_3\text{H}_6\text{O}_2$)				Kendall and Grass, 1921			
Sumarokov and Volodutskaya, 1956							
mol%		mol%		mol%	n	mol%	n
L	V	L	V	25°			
at b. t.				0	0.00024	74.63	0.00006
78.80	66.76	42.62	25.16	7.51	.00018	91.14	.00003
61.46	55.70	22.44	14.55	28.80	.00013	100	.00001
54.91	44.67	10.92	8.37	54.59	.00007		
47.06	36.23						
%	d	%	d	Acetic acid ($\text{C}_2\text{H}_4\text{O}_2$) + Butyric acid ($\text{C}_4\text{H}_8\text{O}_2$)			
20°				Kahlbaum, 1893			
p				p	b. t.		
0	1.0505	60	1.0150		0%	50 mol%	100 mol%
10	.0409	70	.0083	13	22.3	39.0	68.6
20	.0378	80	.0029	14	23.5	40.1	69.8
30	.0285	90	0.9990	15	24.6	41.5	70.9
40	.0258	100	.9980	16	25.7	42.9	72.0
50	.0185			17	26.7	44.0	73.0
				18	27.7	45.2	73.9
Waentig and Pescheck, 1918				19	28.6	46.2	74.9
wt%	mol%	d	wt%	20	29.5	47.2	75.8
30°				21	30.4	48.2	76.6
100	100	0.9832	35.38	22	31.2	49.2	77.4
76.96	73.03	.9946	21.22	23	32.1	50.0	78.2
50.59	45.36	1.0124	0	24	32.9	50.8	79.0
				25	33.7	51.6	79.8
				26	34.4	52.3	80.5
Sumarokov and Volodutskaya, 1956				27	35.1	53.0	81.1
%	η (centistokes $\cdot 10^3$)			28	35.7	53.7	81.8
20°				29	36.4	54.3	82.5
10	1230	910		30	37.1	55.0	83.1
20	1230	905		31	37.7	55.6	83.7
30	1220	894		32	38.3	56.2	84.3
40	1220	884		33	38.9	56.8	84.9
50	1210	884		34	39.4	57.4	85.5
60	1210	884		35	40.0	57.9	86.1
70	1210	853		36	40.5	58.4	86.6
80	1196	853		37	41.0	58.9	87.1
90	1196	837		38	41.5	59.5	87.6
				39	42.0	59.9	88.1
				40	42.5	60.4	88.6
				41	43.0	60.9	89.1
				42	43.5	61.4	89.6
				43	44.0	61.9	90.0
				44	44.5	62.4	90.5
				45	44.9	62.9	91.0
				46	45.4	63.4	91.4
				47	45.8	63.8	91.8
				48	46.3	64.3	92.3
				49	46.7	64.8	92.7
				50	47.2	65.3	93.1
				51	47.6	65.8	93.5
				52	-	66.2	93.9

Landolt, 1865				Acetic acid ($C_2H_4O_2$) + Undecanoic acid ($C_{11}H_{22}O_2$)	
%	t	d	n_D		
20°				Ralston and Hoerr, 1942	
0	20.0	1.0511	1.3720	%	f. t.
47.85	20.2	1.0043	1.3644		
100	20.2	0.9591	1.3973	88.9	20
0	20	1.0500	1.3706	100	28.13
59.5	20	0.9912	1.3850		
100	20	0.9593	1.3955		
Buchkremer, 1890				Acetic acid ($C_2H_4O_2$) + Lauric acid ($C_{12}H_{24}O_2$)	
%	d	n_D		Ralston and Hoerr, 1942	
20°				%	f. t.
100	0.97225	1.39506		45.0	20
75.892	0.98841	.38937		74.8	30
53.237	1.00564	.38464		93.7	40
26.029	1.02878	.37938		100.0	43.86
0	1.05239	.37496			
Acetic acid ($C_2H_4O_2$) + Isobutyric acid ($C_4H_8O_2$)				Acetic acid ($C_2H_4O_2$) + Tridecanoic acid ($C_{13}H_{26}O_2$)	
Kremann, Gugl and Meingast, 1914				Ralston and Hoerr, 1942	
mol%	d	n (water=1)		%	f. t.
11°					
0	1.060	1.989		49.2	20
33.34	1.026	.33		79.8	30
50.00	1.010	.46		98.8	40
66.67	0.993	.34		100.0	41.76
100	0.960	.10			
Kremann, Meingast and Gugl, 1914				Acetic acid ($C_2H_4O_2$) + Myristic acid ($C_{14}H_{28}O_2$)	
61.9 vol%	10°	Dv = +0.18%		Ralston and Hoerr, 1942	
51 mol%	U= 0.483	Q mix	16° 0.662 cal/g	%	f. t.
Acetic acid ($C_2H_4O_2$) + Capric acid ($C_{10}H_{20}O_2$)				9.1	20
Ralston and Hoerr, 1942				33.8	30
%	f. t.			74.3	40
85.1	20			93.4	50
98.8	30			100	53.78
100.0	30.92				

Acetic acid (C ₂ H ₄ O ₂) + Pentadecanoic acid (C ₁₅ H ₃₀ O ₂)			
Ralston and Hoerr, 1942			
%	f. t.		
8.1	20		
38.3	30		
77.8	40		
96.3	50		
100.0	52.49		
Acetic acid (C ₂ H ₄ O ₂) + Palmitic acid (C ₁₆ H ₃₂ O ₂)			
Ralston and Hoerr, 1942			
%	f. t.		
2.10	20		
7.51	30		
34.1	40		
75.8	50		
95.8	60		
100.0	62.41		
Acetic acid (C ₂ H ₄ O ₂) + Margoric acid (C ₁₇ H ₃₄ O ₂)			
Ralston and Hoerr, 1942			
%	f. t.	%	f. t.
1.25	20	79.4	50
6.13	30	98.2	60
37.9	40	100.0	60.94
Acetic acid (C ₂ H ₄ O ₂) + Stearic acid (C ₁₈ H ₃₆ O ₂)			
Ralston and Hoerr, 1942			
%	f. t.	%	f. t.
0.12	20	42.8	50
1.65	30	82.9	60
7.05	40	100.0	69.20
Acetic acid (C ₂ H ₄ O ₂) + Lactic acid (C ₃ H ₅ O ₃)			
Kremann, Meingast and Gugl, 1914			
50 mol% U (room temperature)= 0.536			
Q mix (16°) = 0.821 cal/g			

Acetic acid (C ₂ H ₄ O ₂) + Monochloroacetic acid (C ₂ H ₃ O ₂ Cl)			
Mameli and Mannessier, 1913			
mol%	f. t. I	mol%	f. t. II
100	61.65	100	56.68
92.65	55.15	98.52	55.48
88.46	51.10	96.11	54.50
86.79	49.87	90.61	48.53
84.70	47.93	81.03	39.50
81.69	45.15	74.51	33.78
79.08	42.65	67.32	23.65
76.75	40.11	67.22	23.40
71.66	34.94	63.10	19.14
68.66	31.73	54.40	8.53
67.89	29.85	48.85	-0.10
65.37	27.05	48.14	-1.60
62.63	24.41	47.46	-2.00
61.85	23.00	44.17	-5.52
58.93	19.50	41.79	-10.08
58.75	19.25	40.19	-8.58
56.63	15.68	37.15	-4.58
55.59	14.90	32.80	-1.58
51.31	10.50	27.95	2.02
49.60	5.80	21.63	6.17
47.42	3.45	17.90	8.22
45.84	0.65	15.61	9.32
43.76	-1.75	14.89	9.96
38.31	-6.83	8.34	13.02
25.93	3.47	7.66	13.42
18.96	7.67	4.33	14.88
13.34	10.65	1.39	16.10
0.00	16.67	0.00	16.67
Kendall, 1914			
mol%	f. t.	mol%	f. t.
0	16.4	49.7	22.2
8.2	10.7	59.7	29.7
20.4	1.7	70.6	38.0
29.0	-4.5	84.5	49.4
29.0	+5.0	100.0	61.4
38.0	12.8		
Bokhovkin, 1956 (fig.)			
mol%	f. t.	mol%	f. t.
0	16	60	25
20	5	80	45
30	-5	100	55 II
40	+2		
mol%	σ		
	40°	50°	60°
5	26.2	25.3	24.4
10	26.8	25.9	25.1
15	27.4	26.5	25.7
20	28.2	27.3	26.8
25	28.9	28.0	27.0
30	29.7	28.6	27.7
35	30.4	29.3	28.4
40	31.0	30.1	29.0
45	31.7	30.7	29.6
50	32.5	31.4	30.3
55	33.1	32.0	30.8
60	36.6	32.7	31.4

Kendall and Gross, 1921					
mol%	κ		mol%	κ	
	25°	60°		25°	60°
0	0.00024	-	55.20	0.00527	-
7.25	.00098	-	68.21	.00559	0.01554
14.76	.00192	-	74.81	-	.01564
23.02	.00299	-	84.13	-	.01533
30.50	.00384	-	93.20	-	.01467
40.16	.00455	-	100	-	.01410
49.60	.00503	-			
Acetic acid ($C_2H_4O_2$) + Dichloroacetic acid ($C_2H_2O_2Cl_2$)					
Kendall, 1914					
mol%	f. t.	mol%	f. t.		
0	16.4	56.6	-40.8		
8.6	10.3	70.3	-18.2		
20.8	-0.7	82.1	-4.2		
29.5	-10.8	91.4	+3.9		
36.4	-21.5	100	9.7		
45.0	-37.0				
Bokhovkin, 1956 (fig.)					
mol%	f. t.	mol%	f. t.		
0	10	70	-20		
20	0	80	-5		
40	-30	100	+5		
52	-50				
mol%	σ				
	40°	50°	60°		
15	28.5	27.5	26.6		
20	29.2	28.1	27.3		
25	29.7	28.7	27.9		
30	30.3	29.2	28.5		
35	30.8	29.8	29.0		
40	31.3	30.3	29.5		
45	31.8	30.7	30.0		
50	32.3	31.2	30.4		
55	32.7	31.6	30.7		
60	33.0	31.9	31.0		
65	33.3	32.2	31.4		
70	33.6	32.5	31.7		
75	33.8	32.7	31.9		
80	34.0	32.9	32.1		
85	34.2	33.2	32.3		
90	34.3	33.4	32.5		
Acetic acid ($C_2H_4O_2$) + Trichloroacetic acid ($C_2HO_2Cl_3$)					
Kendall, 1914					
mol%	f. t.	mol%	f. t.		
0	+16.4	53.9	-0.1		
8.7	9.9	61.5	+15.4		
15.4	3.1	69.8	28.4		
24.3	-10.1	77.5	37.6		
31.0	-25.3	87.2	47.3		
49.0	-13.3	100	57.3		
Bokhovkin, 1956 (fig.)					
mol%	f. t.	mol%	f. t.		
0	20	60	+10		
20	-2	80	40		
40	-42	100	55		
50	-10				
mol%	σ				
	40°	50°	60°		
5	26.2	25.1	24.3		
10	26.9	25.9	24.9		
15	27.5	26.6	25.6		
20	28.2	27.2	26.2		
25	28.8	27.9	26.9		
30	29.5	28.5	27.6		
35	30.1	29.1	28.2		
40	30.7	29.7	28.7		
45	31.1	30.2	29.3		
50	31.6	30.7	29.8		
Kendall and Brakeley, 1921					
mol%	d	η	mol%	d	η
	25°				
0	1.049	1121	43.48	1.409	4346
7.37	.129	1532	52.62	.457	5176
17.77	.223	2228	58.53	.491	5859
32.09	.337	3362	63.81	.508	6854
Kendall and Gross, 1921					
mol%	κ		mol%	κ	
	25°	60°		25°	60°
0	0.00024	-	44.87	0.00564	-
4.86	.00167	-	52.39	.00380	-
10.43	.00367	-	60.39	.00225	-
18.72	.00637	-	68.34	.00115	-
23.72	.00805	-	71.73	.00084	0.00291
27.67	.00831	-	82.37	-	.00104
31.75	.00808	-	90.53	-	.00038
37.99	.00710	-	100	-	.00006

Acetic acid ($C_2H_4O_2$) + Benzoic acid ($C_7H_6O_2$)

Beckmann, 1888

%	D f. t.
0.850	-0.270
4.041	1.215
9.274	2.650
17.62	4.770
19.95	5.340

Kendall, 1924

mol%	f. t.	mol%	f. t.
100	121.0	28.3	50.9
87.6	111.5	20.8	38.2
72.6	100.3	14.5	19.2
61.0	90.1	9.7	10.4
50.6	79.1	5.2	13.0
43.4	71.5	0	16.4
35.3	60.9		

Mortimer, 1923

mol%	f. t.	mol%	f. t.
7.8	20	96.8	80
11.8	40	61.7	100
21.0	60	100.0	121.0

Acetic acid ($C_2H_4O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Bokhovkin and Chesnokov, 1955

mol%	f. t.	mol%	f. t.
0	16.6	26.52	7.7
2.27	15.1	28.94	11.5
4.67	13.6	30.60	13.8
6.75	12.0	35.02	19.8
9.94	10.6	39.82	26.6
12.82	8.7	42.89	29.2
15.90	7.0	46.13	32.6
19.19	4.2	50.72	37.2
21.28	3.3	56.96	42.5
22.72	2.5	100	75
24.97	5.2		

Propionic acid ($C_3H_6O_2$) + Isobutyric acid
($C_4H_8O_2$)

Timmermans, 1934

wt%	mol%	f. t.	E
0	0	-20.8	-
20.7	18.0	-35.6	-
32.0	28.35	-43.5	-
47.1	42.8	-53.5	-
61.4	57.2	-61	-63.7
79.0	76.0	-60	-64.0
100	100	-46.0	-

Propionic acid ($C_3H_6O_2$) + Valeric acid ($C_5H_{10}O_2$)

Timmermans, 1934

wt%	mol%	f. t.	E
100	100	-34.5	-
79.1	73.3	-51.5	-
62.8	55.05	-66.0	-62.0
51.6	43.6	-51.5	-62.6
28.25	22.2	-40.4	-
14.9	11.3	-31.8	-
0	0	-20.8	-

Propionic acid ($C_3H_6O_2$) + Isovaleric acid
($C_5H_{10}O_2$)

Timmermans, 1934

wt%	mol%	f. t.	E
100	100	-30.0	-
74.25	67.7	-	-55.5
56.7	48.7	-61.0	-55.6
48.5	40.6	-	-56.9
36.0	29.8	-44.0	-55.0
23.8	18.5	-34.9	-
15.1	11.4	-30.9	-
0	0	-20.8	-

Butyric acid ($C_4H_8O_2$) + Pyruvic acid ($C_3H_4O_3$)

Lecat, 1949

%	b. t.
0	164.0
34	162.4 Az
100	166.8

Valeric acid (C ₅ H ₁₀ O ₂) + Isovaleric acid			49 114.6 112.9 112.4 111.9 110.1		
Timmermans, 1934 (C ₅ H ₁₀ O ₂)			50 115.0 113.3 112.8 112.3 110.5		
			51 115.4 113.7 113.2 112.7 110.9		
			52 115.8 114.1 113.6 113.1 111.3		
			53 116.2 114.5 114.0 113.5 111.7		
			54 116.6 114.9 114.4 113.9 112.4		
			55 117.0 115.3 114.8 114.2 112.5		
			56 117.3 115.7 115.2 114.6 112.8		
			57 117.7 116.0 115.5 115.0 -		
			58 118.1 116.4 115.9 115.3 -		
			59 118.4 116.8 116.2 115.7 -		
			60 118.8 117.1 116.6 116.1 -		
			61 119.1 117.5 116.9 116.4 -		
			62 119.5 117.8 117.3 116.7 -		
			63 - 118.2 117.6 117.1 -		
			64 - 118.5 118.0 117.4 -		
			65 - 118.8 118.3 117.7 -		
			66 - - 118.1 -		
			67 - - 118.4 -		
Valeric acid (C ₅ H ₁₀ O ₂) + Monochloroacetic acid					
(C ₂ H ₃ O ₂ Cl)					
Kahlbaum and Schroter, 1893					
p		b. t.			
100%	75.08%	45.53%	25.46%	0%	
2.0	-	-	56.7	-	60.7
2.5	-	-	60.8	-	62.9
3.0	-	-	63.6	61.2	64.7
3.5	63.2	-	65.7	63.9	-
4.0	66.8	-	67.5	66.1	67.9
4.5	69.3	69.6	69.0	68.1	-
5.0	71.4	71.6	70.7	69.8	70.5
5.5	73.2	73.4	72.2	71.4	-
6.0	74.9	74.8	73.6	72.8	72.9
6.5	76.5	76.2	-	74.1	-
7.0	77.9	77.4	76.1	75.4	75.1
7.5	79.3	78.5	-	-	-
8.0	80.5	79.5	78.3	77.7	77.1
8.5	-	80.4	-	-	-
9	82.8	81.4	80.2	79.8	79.1
10	84.7	83.1	82.1	81.7	80.8
11	86.5	84.7	83.9	83.5	82.4
12	88.0	86.1	85.5	85.1	84.0
13	89.4	87.4	87.0	86.6	85.4
14	90.7	88.7	88.3	88.0	86.6
15	91.8	89.8	89.5	89.2	87.8
16	92.9	91.0	90.6	90.3	88.9
17	94.0	92.2	91.7	91.4	90.0
18	95.0	93.3	92.8	92.5	91.0
19	96.0	94.2	93.8	93.5	92.0
20	96.9	95.1	94.8	94.5	93.0
21	97.8	96.1	95.7	95.4	93.9
22	98.6	97.0	96.6	96.3	94.8
23	99.5	97.8	97.4	97.1	95.6
24	100.3	98.6	98.3	97.9	95.6
25	101.0	99.4	98.9	98.7	97.2
26	101.8	100.1	99.7	99.4	98.0
27	102.5	101.0	100.4	100.2	98.7
28	103.3	101.7	101.0	100.9	99.4
29	104.0	102.3	101.7	101.6	100.1
30	104.6	103.0	102.3	102.3	100.7
31	105.3	103.6	102.9	102.9	101.3
32	105.9	104.2	103.5	103.5	101.9
33	106.5	104.8	104.2	104.1	102.5
34	107.1	105.4	104.7	104.7	103.1
35	107.7	105.9	105.3	105.2	103.7
36	108.2	106.5	105.9	105.8	104.2
37	108.8	107.1	106.5	106.3	104.7
38	109.4	107.6	107.0	106.8	105.2
39	109.9	108.1	107.6	107.4	105.7
40	110.4	108.6	108.1	107.9	106.2
41	110.9	109.1	108.6	108.3	106.6
42	111.4	109.6	109.1	108.8	107.1
43	111.9	110.1	109.6	109.3	107.5
44	112.4	110.6	110.0	109.7	108.0
45	112.8	111.0	110.5	110.2	108.4
46	113.3	111.5	111.0	110.6	108.9
47	113.8	112.0	111.4	111.1	109.3
48	114.2	112.4	111.9	111.5	109.7
Lecat, 1949					
%		b. t.			
0		186.35			
3		186.33 Az			
100		189.35			
Caproic acid (C ₆ H ₁₂ O ₂) + Caprylic acid (C ₈ H ₁₆ O ₂)					
Grandal and Rogers, 1944					
wt%		mol%		f. t.	
0	0	-3.4	47.29	41.91	-11.2
5.07	4.12	-5.1	49.56	44.18	-8.0
10.10	8.30	-6.6	55.14	49.75	-4.3
15.22	12.64	-8.2	60.32	55.05	-1.6
20.18	16.92	-10.3	65.20	60.15	0.9
25.04	21.20	-12.8	70.73	66.04	3.7
27.62	23.51	-14.7	75.69	71.50	5.9
29.56	25.26	-15.8	79.99	76.30	8.1
32.81	28.23	-16.0	85.09	82.13	10.2
35.20	30.44	-15.4	90.21	88.13	12.6
40.30	35.22	-14.1	95.73	94.75	14.8
42.62	37.42	-13.7	100.00	100.00	16.7
45.45	40.16	-13.1			

Caproic acid (C ₆ H ₁₂ O ₂) + Monobromacetic acid (C ₂ H ₃ O ₂ Br)	
Lecat, 1949	
%	b. t.
0	205.15
-	204.4 Az
100	205.1

Caproic acid (C ₆ H ₁₂ O ₂) + Trichloroacetic acid (C ₂ HO ₂ Cl ₃)	
Lecat, 1949	
%	b. t.
0	205.15
45	210.4 Az
100	197.55

Caprylic acid (C ₈ H ₁₆ O ₂) + Capric acid (C ₁₀ H ₂₀ O ₂)					
Grandal and Rogers, 1944					
wt%	mol%	f. t.	wt%	mol%	f. t.
0	0	16.7	50.66	46.22	9.5
4.97	4.20	15.2	51.22	46.78	10.7
9.97	8.48	13.7	55.20	50.77	14.3
15.00	12.88	12.2	60.82	56.52	17.5
20.08	17.37	10.5	65.33	61.20	19.4
23.71	20.64	9.0	69.75	65.88	21.0
30.02	26.43	5.7	75.20	71.74	23.0
31.38	27.69	5.1	80.04	77.05	24.7
35.23	31.28	5.6	85.01	82.61	26.6
39.60	35.43	6.5	89.89	88.15	28.2
42.15	37.87	7.1	94.98	94.06	29.9
48.44	44.02	8.0	100.00	100.00	31.6

Capric acid (C ₁₀ H ₂₀ O ₂) + Undecanoic acid (C ₁₁ H ₂₂ O ₂)	
Slagle and Ott, 1933	
mol%	crystal spacing (in Å)
100.0	25.32
89.3	25.03
79.2	24.69
69.8	24.55
58.2	24.37
48.2	24.20
38.1	23.71
28.6	23.58
18.8	23.33
9.3	23.19
0.0	23.02

Capric acid (C ₁₀ H ₂₀ O ₂) + Lauric acid (C ₁₂ H ₂₄ O ₂)			
Kulka and Sandin, 1937			
mol%	f. t.	mol%	f. t.
0.0	31.2	47.4	23.0
8.3	26.8	50.0	24.0
20.1	21.3	50.3	24.2
24.4	20.3	57.0	27.7
26.6	19.8	64.8	31.2
27.5	19.6	73.9	34.5
28.9	20.4	81.1	37.6
37.5	22.3	90.4	40.9
42.7	22.9	100.0	43.9

Grandal and Rogers, 1944					
wt%	mol%	f. t.	wt%	mol%	f. t.
0	0	31.6	50.16	46.39	24.2
5.02	4.36	30.4	51.53	47.76	25.5
10.05	8.77	29.1	52.48	48.71	27.3
15.83	13.92	27.7	54.51	50.76	29.0
19.59	17.32	26.6	60.98	57.34	32.0
24.49	21.81	24.5	70.32	67.07	35.2
30.06	26.99	21.8	80.57	78.10	38.7
31.70	28.53	21.4	84.85	82.81	39.9
35.39	32.02	22.0	90.73	89.38	41.5
39.58	36.03	22.7	94.94	94.17	42.7
44.85	41.15	23.5	100.00	100.00	44.2
49.04	45.28	24.0			

Paquot and Petit, 1952

mol%	f. t.	mol%	f. t.
0.0	31.2	36.4	21.9
5.0	28.0	46.3	22.9
8.7	26.15	50.0	23.5
12.5	24.2	52.4	24.9
17.7	21.6	56.3	26.9
20.5	20.6	66.7	31.6
22.5	20.0	77.5	35.6
25.0	19.2	88.6	39.8
26.0	19.35	94.2	41.6
28.3	20.1	100.0	43.3
32.5	21.1		

Slagle and Ott, 1933

mol%	crystal spacing (in Å)
100.0	27.18
77.5	27.10
56.2	25.90
46.6	25.31
36.8	24.94
17.4	23.53
0.0	23.02

Capric acid ($C_{10}H_{20}O_2$) + Myristic acid
($C_{14}H_{28}O_2$)

Paquot and Petit, 1952

mol%	f. t.	mol%	f. t.
0.0	31.2	34.0	26.3
3.5	27.3	36.0	27.5
8.3	24.2	37.3	28.9
11.9	23.0	42.0	32.0
15.0	21.6	52.6	38.2
17.1	21.0	63.8	42.1
19.0	21.1	75.1	46.4
20.1	21.6	87.2	50.0
25.6	24.3	94.8	52.1
31.2	25.8	100.0	53.4

Undecanoic acid ($C_{11}H_{22}O_2$) + Lauric acid
($C_{12}H_{24}O_2$)

Kulka and Sandin, 1937

mol%	f. t.	mol%	f. t.
0.0	28.2	52.5	31.6
7.6	27.6	53.7	31.9
14.6	27.4	56.0	32.4
20.0	27.3	58.8	33.1
22.4	27.4	63.9	34.4
25.4	27.6	67.0	35.1
28.7	28.0	75.0	37.4
32.4	28.6	77.4	38.0
36.4	29.2	89.7	41.2
40.7	29.9	90.0	41.4
46.2	30.7	100.0	43.9
49.1	31.1		
51.3	31.5		

Lauric acid ($C_{12}H_{24}O_2$) + Myristic acid
($C_{14}H_{28}O_2$)

Heintz, 1855

%	f. t.	%	f. t.
0	43.6	60	43.0
10	41.3	70	46.7
20	38.5	80	49.6
30	35.1	90	51.8
40	36.7	100	53.8
50	37.4		

Efremov, 1929-30

%	f. t.	m. t.	E
100	49.8	-	-
95	48.7	46.5	-
90	47.5	43.8	-
80	44.9	39.0	-
75	43.5	37.0	28.2
70	42.1	35.9	29.5
65	40.0	34.3	30.5
60	38.3	33.5	30.0
55	36.4	32.2	29.1
50	33.9	31.5	-
40	31.0	30.5	-
35	30.1	30.1	-
30	30.5	30.3	-
25	32.5	31.3	-
20	34.8	33.0	-
10	38.8	36.7	-
5	41.0	39.5	-
0	42.7	-	-

E : 34.5% 30.1°

Paquot and Petit, 1952

mol%	f. t.	mol%	f. t.
0.0	43.3	42.9	36.0
4.4	41.2	46.6	36.1
8.6	39.2	51.0	36.4
13.6	37.2	55.8	38.0
17.4	35.7	61.1	40.4
22.7	34.0	66.9	42.8
24.6	33.1	72.4	44.9
26.4	33.6	83.1	48.3
28.1	33.6	94.3	51.8
32.7	34.5	100.0	53.4
37.0	35.3		

Fieldes and Hartman, 1951 and 1955

%	crystal spacing (in Å)		
	d ₁	d ₂	d ₃
0	27.0	4.12*	3.73
5	"	4.14	3.80
10	"	4.13	3.82
20	27.8	"	3.84
25	28.1	4.14	"
35	28.4	4.13	3.82
45	29.4	4.14	3.84
53.2	29.4	4.13	3.82
60	30.1	4.14	"
65	30.4	4.13	"
70	30.7	4.14	"
75	31.1	4.13	3.74
80	30.8	4.12	"
85	"	4.14	"
90	31.1	"	3.73
95	31.5	4.13	3.74
100	"	4.12	3.73

* Error in the designation of the system in the diagram of 1955

Lauric acid (C₁₂H₂₄O₂) + Isomyristic acid
(C₁₄H₂₈O₂)

von Sydow, 1954

%	f. t.
0	44
E	31
100	53

Lauric acid (C₁₂H₂₄O₂) + Isopentadecanoic acid
(C₁₅H₃₀O₂)

von Sydow, 1954

%	f. t.
0	44
E	32
100	52

Lauric acid (C₁₂H₂₄O₂) + Palmitic acid
(C₁₆H₃₂O₂)

Heintz, 1855

%	f. t.	%	f. t.
0	43.6	60	51.2
10	41.5	70	54.5
20	37.1	80	57.4
30	38.3	90	59.8
40	40.1	100	62.0
50	47.0		

Waentig and Pescheck, 1918

wt%	mol%	f. t.	wt%	mol%	f. t.
100	100	60.95	51.92	45.76	43.53
94.00	82.45	59.48	51.45	45.29	43.00
89.87	87.39	58.40	49.09	42.97	42.78
85.59	82.27	57.16	47.83	41.72	42.63
82.04	78.11	56.16	46.22	40.17	41.70
78.83	74.42	55.22	44.32	38.34	40.55
75.66	70.83	54.15	42.02	36.15	39.15
72.62	67.45	53.12	37.65	32.06	38.03
69.91	64.48	52.10	34.97	29.58	37.60
67.60	61.98	51.26	31.95	26.84	37.12
67.24	59.63	50.45	28.29	23.65	36.34
65.40	57.34	49.45	24.64	20.35	35.50
61.41	55.42	48.70	20.32	16.01	36.33
59.96	53.92	48.05	16.17	13.10	36.90
58.06	51.96	47.28	10.87	8.70	38.26
56.31	50.17	46.45	5.32	4.21	40.55
54.72	48.56	45.57	0	0	43.35
52.16	46.00	44.08			

Efremov, Vinogradov and Tikhomirova, 1937

wt%	mol%	f. t.	E
100	100	59.2	-
95	93.74	56.5	55.0
90	87.55	54.6	51.3
85	81.65	52.5	48.0
80	75.76	50.8	45.1
75	70.17	48.8	42.5
70	64.58	46.5	40.3
65	59.27	44.8	38.3
60	53.96	42.5	36.6
55	48.90	40.3	35.1
50	43.86	38.1	34.0
45	38.91	35.8	33.0
40	33.97	33.7	32.0
35	29.28	32.0	31.2
30	24.59	31.0	30.3
25	20.17	31.3	30.8
20	15.75	32.8	31.5
15	11.66	35.0	32.5
10	7.57	37.5	34.5
5	3.78	40.0	-
0	0	42.7	-

E: 27.7% 30.7°

Waentig and Pescheck, 1918					
wt%	mol%	d	wt%	mol%	d
75°					
100	100	0.8457	40.16	34.40	0.8497
85.08	81.67	.8468	27.17	22.57	.8507
72.12	66.90	.8477	15.53	12.56	.8514
59.36	53.30	.8484	0	0	.8527
45.72	39.69	.8493			
Lauric acid (C ₁₂ H ₂₄ O ₂) + Isopalmitic acid (C ₁₆ H ₃₂ O ₂)					
von Sydow, 1954					
mol%		f. t.			
0		44			
50		33 (1+1) (incongruent)			
E		31			
100		62			
Lauric acid (C ₁₂ H ₂₄ O ₂) + Isomargaric acid (C ₁₇ H ₃₄ O ₂)					
von Sydow, 1954					
%		f. t.			
0		44			
E		34			
100		60			
Lauric acid (C ₁₂ H ₂₄ O ₂) + Stearic acid (C ₁₈ H ₃₆ O ₂)					
Heintz, 1855					
%		f. t.	%		f. t.
0		43.6	60		59.0
10		41.5	70		62.0
20		38.5	80		64.7
30		43.4	90		67.0
40		50.8	100		69.2
50		55.8			

Efremov, 1929-30					
%	f. t.	m. t.	tr. t.		
100	67.7	-	-		
95	66.2	65.0	29.0		
90	65.2	62.1	30.5		
85	64.1	59.8	31.8		
80	63.0	57.5	32.8		
70	60.2	53.3	34.2		
60	57.2	49.2	35.5		
55	55.7	47.0	35.9		
50	52.8	46.1	36.2		
40	46.8	42.1	35.8		
30	40.3	38.8	35.0		
25	38.3	37.7	-		
20	37.0	36.9	-		
15	36.5	36.5	-		
10	37.9	37.2	-		
5	40.1	39.0	-		
0	42.7	-	-		
E: 17.5%		36.5°			
Waentig and Pescheck, 1918					
%	mol%	d	%	mol%	d
75°					
0	0	0.8527	61.27	52.70	0.8470
15.81	11.68	.8510	74.86	67.71	.8455
34.04	26.65	.8494	100	100	.8436
48.03	40.00	.8481			
Tridecanoic acid (C ₁₃ H ₂₆ O ₂) + Isomyristic acid (C ₁₄ H ₂₈ O ₂)					
von Sydow, 1954					
%		f. t.			
0		41			
E		39			
100		53			
Tridecanoic acid (C ₁₃ H ₂₆ O ₂) + Isopentadecanoic acid (C ₁₅ H ₃₀ O ₂)					
von Sydow, 1954					
%		f. t.			
0		41			
E		40			
100		52			

Tridecanoic acid ($C_{13}H_{26}O_2$) + Isopalmitic acid
($C_{16}H_{32}O_2$)

von Sydow, 1954

%	f. t.
0	41
E	34
100	62

Tridecanoic acid ($C_{13}H_{26}O_2$) + Isomargarinic acid
($C_{17}H_{34}O_2$)

von Sydow, 1954

mol%	f. t.
0	41
E	34
50	38 (1+1)
E	37
100	60

Tridecanoic acid ($C_{13}H_{26}O_2$) + Isostearic acid
($C_{18}H_{36}O_2$)

von Sydow, 1954

%	f. t.
0	41
E	32
100	68

Myristic acid ($C_{14}H_{28}O_2$) + Isomyristic acid
($C_{14}H_{28}O_2$)

von Sydow, 1954

%	f. t.
0	54
E	39
100	53

Myristic acid ($C_{14}H_{28}O_2$) + Isopentadecanoic acid
($C_{15}H_{30}O_2$)

von Sydow, 1954

%	f. t.
0	54
E	47
100	52

Myristic acid ($C_{14}H_{28}O_2$) + Palmitic acid
($C_{16}H_{32}O_2$)

Efremov, 1937

wt%	mol%	f. t.	m. t.
100	100	59.2	-
95	94.63	58.0	56.5
90	88.90	55.9	54.1
85	83.46	54.3	51.5
80	78.05	52.7	49.1
75	72.75	51.1	47.3
70	67.60	49.5	45.8
65	62.29	48.3	44.3
60	57.08	47.1	43.2
55	52.04	46.0	42.5
50	47.02	44.3	41.5
55	42.08	43.5	41.1
40	37.10	42.4	40.4
35	32.39	41.3	40.0
30	27.49	40.5	39.8
25	22.77	39.8	39.6
20	18.10	39.5	39.5
15	13.50	42.2	41.0
10	9.00	44.8	42.9
5	4.25	47.5	46.3
0	0	49.8	-

E: 21.3% 39.5°

Kulka and Sandin, 1937

mol%	f. t.	mol%	f. t.
0.0	54.1	43.7	47.3
8.7	50.4	48.5	37.3
20.3	46.7	54.7	48.7
25.4	45.5	62.6	51.9
27.5	45.2	71.7	54.7
29.4	45.4	84.0	58.3
30.6	45.6	100.0	62.3
36.1	46.7		

Heintz, 1855				Myristic acid ($C_{14}H_{28}O_2$) + Stearic acid ($C_{18}H_{36}O_2$)			
%	f. t.	%	f. t.	%	f. t.	%	f. t.
0	53.8	50	47.8	0	53.8	60	60.3
10	51.8	60	51.5	10	51.7	70	62.8
20	49.5	70	54.9	20	50.4	80	65.0
30	46.2	80	59.0	30	48.2	90	67.1
35	46.5	90	60.1	40	47.8	100	69.2
40	47.0	100	62.0	50	54.5		
Fieldes and Hartman, 1955 (fig.)				Myristic acid ($C_{14}H_{28}O_2$) + Isostearic acid ($C_{18}H_{36}O_2$)			
mol%		crystal spacing (in Å)		mol%		f. t.	
		d_1	d_2				
0	31.3	3.720		0	54		
8	31.5	.775		50	43.5 (1+1) (incongruent)		
26	33.7	.780		E	42		
38	33.3	.780		100	68		
50	34.0	.780					
60	35.0	.778					
65	35.3	.770					
77	35.2	.715					
80	35.2	.71					
100	35.0	.71					
Myristic acid ($C_{14}H_{28}O_2$) + Isopalmitic acid ($C_{16}H_{32}O_2$)				Myristic acid ($C_{14}H_{28}O_2$) + Isoeicosanic acid ($C_{20}H_{40}O_2$)			
von Sydow, 1954				von Sydow, 1954			
mol%		f. t.		%		f. t.	
0	54			0	54		
50	44 (1+1) (incongruent)			E	44		
E	42			100	74		
100	62						
Myristic acid ($C_{14}H_{28}O_2$) + Isomargarinic acid ($C_{17}H_{34}O_2$)				Isomyristic acid ($C_{14}H_{28}O_2$) + Pentadecanoic acid ($C_{15}H_{30}O_2$)			
von Sydow, 1954				von Sydow, 1954			
mol%		f. t.		%		f. t.	
0	54			0	53		
E	43			E	37		
50	44 (1+1)			100	52		
E	43						
100	60						

Pentadecanoic acid ($C_{15}H_{30}O_2$) + Isopentadecanoic acid ($C_{15}H_{30}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	44
100	52

Pentadecanoic acid ($C_{15}H_{30}O_2$) + Isopalmitic acid ($C_{16}H_{32}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	49
100	62

Pentadecanoic acid ($C_{15}H_{30}O_2$) + Isomargarinic acid ($C_{17}H_{34}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	51
50	52 (1+1)
E	50.5
100	60

Pentadecanoic acid ($C_{15}H_{30}O_2$) + Isostearic acid ($C_{18}H_{36}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	45.5
100	68

Pentadecanoic acid ($C_{15}H_{30}O_2$) + Isoeicosanic acid ($C_{20}H_{40}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	44.5
50	46.5 (1+1) (inconfruent)
100	74

Isopentadecanoic acid ($C_{15}H_{30}O_2$) + Palmitic acid ($C_{16}H_{32}O_2$)

von Sydow, 1954

%	f. t.
0	52
E	39
100	63

Palmitic acid ($C_{16}H_{32}O_2$) + Margarinic acid ($C_{17}H_{34}O_2$)

Shriner, Fulton and Burks, Jr., 1933

mol%	f. t.	mol%	f. t.
100	59.35	40	55.30
90	58.10	30	55.95
80	56.95	20	57.15
70	56.35	10	58.80
60	55.85	0	60.70
50	55.50		

Smith, 1936

mol%	f. t.	mol%	f. t.
100.0	61.19	48.9	57.00
96.5	60.67	46.7	56.93
89.6	59.85	43.5	56.76
82.35	59.06	41.2	56.80
77.1	58.57	38.55	56.89
72.1	58.11	36.8	57.06
67.75	57.89	34.2	57.31
64.2	57.70	29.45	57.89
61.1	57.56	19.7	59.54
59.3	57.47	9.9	60.84
56.6	57.35	2.5	62.18
54.3	57.25	0.0	62.67
51.5	57.12		

Palmitic acid ($C_{16}H_{32}O_2$) + Isomargarinic acid
($C_{17}H_{34}O_2$)

von Sydow, 1954

%	f. t.
0	63
E	55
100	60

Palmitic acid ($C_{16}H_{32}O_2$) + Stearic acid
($C_{18}H_{36}O_2$)

Heintz, 1855

%	f. t.	%	f. t.
0	62.0	50	56.6
10	60.1	60	59.8
20	57.5	70	62.9
30	55.1	80	65.3
32.5	55.2	90	67.2
35	55.6	100	69.2
40	56.3		

De Visser, 1898

%	f. t.	%	f. t.
100	69.32	43	56.31
90	67.02	42	56.25
80	64.51	41	56.19
70	61.73	40	56.11
60	58.76	39	56.00
55	57.20	38	55.88
54	56.85	37	55.75
53	56.63	36	55.62
52	56.50	34	55.38
51	56.44	32	55.12
50	56.42	30	54.85
49	56.41	29	54.92
48	56.40	25	55.46
47	56.40	20	56.53
46	56.39	15	57.80
45	56.38	10	59.31
44	56.36	0	62.618 (1+1)

Dubovitz, 1911

%	f. t.	%	f. t.
0	62.0	60	60.3
10	60.1	70	62.9
20	57.5	80	65
30	55.1	90	67.2
40	56.3	100	69.2
50	56.6		

Carlinfanti and Levi-Malvano, 1909

%	f. t.	E	%	f. t.	E
100	68.2	-	50	56.25	56.25
95	67.10	-	45	56.10	-
90	65.90	61.50	40	55.90	-
85	64.75	-	35	55.15	-
80	63.50	-	30	54.75	54.75
75	62.15	-	25	54.95	-
70	60.80	57.00	20	55.75	-
65	59.30	-	15	57	-
60	57.65	-	10	58.40	-
55	56.60	-	5	59.60	-
52.5	56.00	56.00	0	61	-

(1+1)

Twitchell, 1914

%	f. t.	%	f. t.
100	69.04	20	56.13
90	66.80	10	59.01
80	64.29	0	62.14
50	56.09		

Efremov, Vinogradova and Tikhomirova, 1927; 1937

wt%	mol%	f. t.	m. t.
100	100	67.7	-
95	94.63	66.0	64.5
90	88.79	64.4	62.1
85	83.57	62.7	60.0
80	78.37	61.3	58.5
75	73.13	59.7	57.2
70	67.77	58.2	56.1
65	62.46	56.8	55.4
60	57.49	55.9	54.7
55	52.49	55.3	54.2
52.5	50.00	54.9	53.9
50	47.44	54.7	53.7
45	42.81	54.2	53.4
40	37.33	53.6	53.0
35	32.99	53.0	52.8
30	27.77	52.5	52.5
25	23.40	52.8	52.7
20	18.23	53.4	53.1
15	13.66	54.1	53.7
10	9.06	55.3	54.5
5	4.34	56.9	56.0
0	0	59.2	-

E: 29% 52.5°

Joglekar and Watson, 1928 (fig.)			
%	f. t.	%	f. t.
0	62	50	56.0
10	58.9	60	58.5
20	55.9	70	61.5
27	54.5 E	80	64.1
30	54.55	90	67.0
40	55.7	100	69.35
47	56.0 (1+1)		
Shriner, Fulton and Burks, jr., 1933			
mol%	f. t.	mol%	f. t.
100	68.40	40	55.40
90	66.25	30	54.00
80	63.65	27.5	53.60
70	61.20	25	53.95
60	58.15	20	54.85
53	56.10	10	57.50
50	55.90	0	60.70
Francis, Collins and Piper, 1937			
mol%	f. t.	mol%	f. t.
0	62.85	42.46	56.15
1	62.05	45.11	56.35
2.01	61.69	45.7	56.8
3.04	61.37	47.51	56.8
5.00	60.64	50.49	56.56
5.81	60.04	50.8	57.2
7.8	61.30	51.48	56.82
15	59.5	53.8	57.9
20.3	57.8	57.49	59.3
23.09	55.38	67.5	62.1
24.18	55.28	70.0	62.9
25.33	55.04	83.0	66.5
26.89	54.56	84.28	68.11
27.58	54.70	94.0	68.5
28.29	54.84	94.38	68.7
31.38	55.5	97.02	68.68
32.7	55.6	98.5	69.8
39.59	55.89	98.97	69.08
40.7	56.15	100.0	69.32
		(1+1)	
Schuette and Vogel, 1940 (fig.)			
%	f. t.	%	f. t.
0	62.8	60	57
10	58.5	70	59
20	55.5	80	63
30	54	90	66
40	55.5	100	69
50	56		

Ravich and Volnova, 1952 (fig.)					
%	f. t.	%	f. t.		
0	61	50	55		
20	55	60	56		
30	53	80	65		
40	55	100	68		
Kurnakov and Zhemchuzhni, 1912					
%	pressure of flow *				
	16°				
100	8.0	-			
90	8.9	6.3			
80	9.8	6.5			
70	10.2	7.0			
65	10.4	-			
60	10.5	6.9			
55	10.9	-			
50	10.4	7.0			
40	9.7	7.2			
30	9.0	6.5			
20	8.2	6.3			
10	6.0	8.0			
0	5.6	-			
* after 1 1/2 month.					
Efremov, 1928					
Freezing curve ; E: 32.2% 52.5°					
Flowing pressure curve ; max.: 55% 10.5 kg/mm²					
Rawitzer, 1928					
Crystallization velocity expressed as time necessary for the formation of one seed in sec.					
t	velocity of crystallization				
	0.0%	5.1%	14.6%	19.7%	25.1%
44.3	373.4	316.7	247.8	203.4	186.7
47.7	297.9	240.7	203.5	151.6	139.8
50.1	255.4	206.7	145.5	110.8	88.8
52.8	182.0	149.4	80.7	60.8	45.9
53.2	165.4	132.6	70.7	57.7	43.9
55.3	130.6	84.0	32.8	14.2	3.1
56.6	126.7	60.6	-	1.7	-
57.5	81.3	44.1	-	-	-
58.1	69.0	36.8	-	-	-
58.5	54.7	29.1	-	-	-
59.25	41.9	11.1	-	-	-
59.9	23.0	2.0	-	-	-
60.7	4.4	-	-	-	-

t	30.1%	33.9%	39.3%	45.2%	49.6%
44.3	194.1	247.7	225.4	229.6	229.6
47.7	145.1	186.6	164.6	178.7	175.6
50.1	97.4	125.7	120.3	123.3	132.4
52.8	53.5	62.9	60.4	68.7	81.3
53.2	47.6	53.1	59.1	65.0	73.5
55.3	7.6	14.2	21.2	30.1	32.4
56.6	-	-	1.3	5.9	9.2

t	55.0%	60.3%	65.3%	69.8%	74.8%
44.3	225.4	263.2	274.9	297.9	301.4
47.7	181.4	206.4	213.8	260.7	266.1
50.1	146.4	151.6	180.1	215.4	231.6
52.8	77.5	85.1	111.8	140.0	151.6
53.2	76.4	83.0	103.2	126.7	140.0
55.3	36.4	42.9	59.9	72.4	93.4
56.6	10.4	21.9	36.9	49.1	73.5
57.5	0.8	3.6	19.7	34.8	52.9
58.1	-	-	6.2	23.6	43.7
58.5	-	-	2.6	16.7	35.8
59.25	-	-	-	8.1	28.3
59.9	-	-	-	-	11.8

t	80.1%	84.8%	90.2%	95.1%	100.0%
44.3	276.4	403.5	-	-	-
47.7	231.6	297.9	357.0	387.8	-
50.1	221.3	266.2	297.8	347.5	424.0
52.8	154.0	196.2	246.6	274.2	317.7
53.2	150.5	215.1	212.9	266.7	328.4
55.3	103.2	154.0	192.4	232.6	286.0
56.6	87.0	141.0	182.0	222.5	244.2
57.5	78.7	112.5	151.6	192.4	232.7
58.1	61.3	92.6	141.0	175.6	244.2
58.5	54.7	85.5	126.7	164.1	217.5
59.25	44.5	73.0	101.1	141.0	188.8
59.9	32.3	56.2	80.7	131.7	164.1
60.7	19.1	41.0	70.9	103.2	126.7
61.5	6.9	26.3	48.8	81.3	113.7
62.6	-	10.5	33.9	58.2	82.7
63.3	-	-	18.2	36.1	69.0
63.7	-	-	12.8	30.8	57.5
64.2	-	-	3.2	24.5	50.8
65.1	-	-	-	7.8	33.5
66.05	-	-	-	-	11.8

Waentig and Pescheck, 1918					
wt%	mol%	d	wt%	mol%	d
75°					
100	100	0.8436	39.63	37.18	0.8448
73.92	71.87	.8437	0	0	.8457
54.52	51.94	.8444			

Slagle and Ott, 1933	
mol%	crystal spacing (in Å)
100.0	39.83
89.3	39.72
72.8	39.49
47.5	38.50
23.3	38.14
9.3	35.88
0.0	35.52

Fieldes and Hartman, 1956 (fig.)		
mol%	Crystal spacing (in Å)	
	d ₁	d ₃
0	35.2	3.710
20	37.3	.758
30	38.2	"
35	38.2	"
43	37.9	"
50	38.5	"
60	39.6	3.755
80	39.4	.70
100	39.4	.70

Pascal, 1914			
%	n _D	%	n _D
70°			
0	1.4304	53.85	1.4317
10.46	.4307	70	.4320
25	.4310	90	.4327
40	.4313	100	.4335

Palmitic acid ($C_{16}H_{32}O_2$) + Isostearic acid
($C_{18}H_{36}O_2$)

von Sydow, 1954

%	f. t.
0	63
(1+1)	52 (uncongruent)
E	50.5
100	68

Palmitic acid ($C_{16}H_{32}O_2$) + Isoeicosanoic acid
($C_{20}H_{40}O_2$)

von Sydow, 1954

%	f. t.
0	63
E	52
(1+1)	53
E	52
100	74

Palmitic acid ($C_{16}H_{32}O_2$) + Behenic acid
($C_{22}H_{44}O_2$)

Twitchell, 1914

%	f. t.	m. t.	%	f. t.
0	62.44	62.14	60	70.72
5	-	59.58	80	75.45
10	60.53	58.26	100	79.99

Palmitic acid ($C_{16}H_{32}O_2$) + Lignoceric acid
($C_{24}H_{48}O_2$)

Meyer, Brod and Soyka, 1913

%	f. t.	%	f. t.
0	62.5	59.6	65.0-66
10.1	58.5-59	64.2	66.0-66.5
17.1	56.5-57.5	69.5	67.0-68
23.4	56.5-57	75.9	68.5-69
29.9	57.0-57.5	82.9	71.0-72
35.3	57.5-58.5	90.7	73.5-74.5
40	58.5-59	100	79.5-80
50	63.0-63.5		

Palmitic acid ($C_{16}H_{32}O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Carlinfanti and Levi-Malvano, 1909

%	f. t.	m. t.	%	f. t.	m. t.
0	61	-	60	46.25	-
10	59.20	-	70	41.60	29
20	57.30	-	80	35	-
30	55.10	-	90	24.80	-
40	52.60	44	100	9	-
50	49.75	-			

Twitchell, 1914

%	f. t.	m. t.
0	62.14	62.44
10	60.30	60.27
20	58.30	58.28
60	46.19	-

Efremov, 1927 and Efremov, Vinogradova and
Tikhomirova, 1937

wt%	mol%	f. t.	E
0	0	59.2	-
5	4.55	59.0	5.8
10	9.19	58.7	6.0
15	13.80	58.2	6.2
20	18.47	57.5	6.5
25	23.32	56.2	6.7
30	28.06	55.0	6.7
35	32.84	53.5	6.7
40	37.91	51.8	6.7
45	42.50	50.2	6.7
50	47.61	48.0	6.7
55	52.65	46.2	6.7
60	57.68	44.3	6.7
65	62.62	41.9	6.7
70	68.08	39.5	6.7
75	73.18	36.3	6.7
80	78.46	32.6	6.7
85	83.70	27.5	6.7
90	89.10	21.2	6.5
95	94.50	12.5	6.4
97.5	97.35	6.7	6.7
100	100	9.1	-

E: 97.6% 6.7°

Koczy and Griengl, 1931

%	f. t.	m. t.	%	f. t.	m. t.
0	62.0	61.0	60	48.0	45.0
10	60.5	59.5	70	43.0	40.0
20	59.0	55.5	80	36.5	34.0
30	57.0	55.0	90	23.0	24.5
40	54.5	52.5	100	14.0	9.0
50	52.0	49.0			

Paquot and Durrenberger, 1951

mol%	f. t.	mol%	f. t.
0	68.7	89.4	39.4
10.4	67.0	90.0	34.0
20.8	65.1	92.3	27.4
30.1	63.1	95.0	18.3
39.3	60.9	95.3	16.0
49.4	57.9	96.5	11.2
61.0	53.7	96.7	10.9
70.5	49.2	97.7	11.2
80.5	44.0	99.0	11.9
85.2	39.7	100.0	12.3

Ravitch and Volnova, 1952 (fig.)

%	f. t.	%	f. t.
0	61	80	36
20	59	99	7
40	54	100	11
60	47		

Pascal, 1914

%	n_D	$a \cdot 10^5$ *	%	n_D	$a \cdot 10^5$ *
70°			70°		
0	1.4304	35	64.44	1.4375	31
9.90	.4325	32	79.70	.4395	33
22.30	.4342	31	90.40	.4410	37
36.50	.4355	30	100	.4415	44
50.59	.4365	30			

* $n^t_{70} = n^o_{70} - a(t-70)$ Palmitic acid ($C_{16}H_{32}O_2$) + Isooleic acid
($C_{18}H_{34}O_2$)

Koczy and Griengl, 1931

%	f. t.	m. t.	%	f. t.	m. t.
0	62.0	61.0	70	45.0	41.5
10	60.5	59.0	80	41.5	37.0
20	59.0	57.5	82.5	39.5	36.0
30	57.5	55.0	90	41.5	37.5
40	55.5	53.0	100	45.0	40.0
50	53.0	50.0			
60	49.5	46.5			

Palmitic acid ($C_{16}H_{32}O_2$) + Elaidic acid
($C_{18}H_{34}O_2$)

Efremov, 1927 and Efremov, Vinogradova and Tikhomirova, 1937

wt%	mol%	f. t.	E
0	0	59.2	-
5.0	4.56	58.0	-
10.0	9.51	56.6	-
12.5	11.49	55.7	-
15.0	13.83	54.8	25.4
20.0	18.50	53.3	27.5
25.0	23.26	51.6	28.8
30.0	28.01	49.7	29.2
35.0	32.18	47.8	29.5
40.0	36.35	46.1	29.8
45.0	41.97	44.0	30.0
50.0	47.59	42.0	30.1
60.0	57.66	37.3	30.1
65.0	62.80	35.0	30.1
70.0	67.94	32.7	30.1
75.0	72.49	30.2	-
80.0	77.04	33.6	29.7
85.0	83.07	37.2	29.3
87.5	86.09	39.1	24.7
90.0	89.10	40.4	-
95.0	94.13	43.2	-
100.0	100.0	45.4	-

Palmitic acid ($C_{16}H_{32}O_2$) + Linoleic acid
($C_{18}H_{32}O_2$)

Koczy and Griengl, 1931

%	f. t.	m. t.	%	f. t.	m. t.
0	62.0	61.0	60	49.0	46.6
10	61.0	59.5	70	45.0	41.5
20	60.0	58.2	80	39.5	35.3
30	58.0	55.8	90	30.3	24.5
40	55.5	53.2	95	23.5	14.0
50	53.0	50.2	100	-12.0	-15.0

Palmitic acid ($C_{16}H_{32}O_2$) + Benzoic acid ($C_7H_6O_2$)

Efremov, Vinogradova and Tikhomirova, 1937

wt%	mol%	f. t.	E
0	0	59.2	-
5.0	9.95	58.5	-
10.0	18.93	57.7	51.0
15.0	26.68	56.5	-
20.0	34.42	56.0	53.5
25.0	40.89	63.0	-
30.0	47.36	68.7	54.7
40.0	58.33	83.3	54.3
50.0	67.73	94.5	55.5
60.0	75.90	104.3	54.5
70.0	83.05	111.0	54.5
80.0	89.36	115.0	53.7
90.0	94.97	118.5	53.3
100.0	100.00	121.4	-

Palmitic acid ($C_{16}H_{32}O_2$) + Salicylic acid
($C_7H_6O_3$)

Efremov, Vinogradova and Tikhomirova, 1937

wt%	mol%	f. t.	E
0	0	155.2	-
5.0	2.84	153.8	50.3
10.0	5.65	152.5	52.3
20.0	12.40	148.5	56.0
25.0	16.02	146.3	57.2
30.0	19.63	143.7	57.5
35.0	23.82	140.7	58.0
40.0	28.00	136.8	58.5
45.0	31.53	131.8	58.6
50.0	35.05	126.3	58.5
60.0	47.26	111.7	58.3
70.0	59.13	92.8	57.5
75.0	65.98	83.0	58.5
80.0	72.83	74.3	58.5
85.0	77.85	64.0	58.5
90.0	82.96	56.1	58.5
95.0	91.04	57.3	58.5
97.5	95.42	58.2	57.5
100	100	59.2	-

Palmitic acid ($C_{16}H_{32}O_2$) + Cholic acid
($C_{26}H_{48}O_5$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	62.0	60.5	68.0	181.6	-
5.3	131.0	55.5	80.0	186.8	-
10.5	146.5	55.3	84.4	188.5	55.5
19.6	154.6	-	89.0	190.7	"
29.8	162.0	-	95.0	192.8	"
39.7	168.0	-	100.0	195.0	193.0
51.4	174.5	-			

Palmitic acid ($C_{16}H_{32}O_2$) + Desoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f. t.	m. t.	%	f. t.	m. t.
0.0	62.5	61.5	89.7	184.0	170.0
9.7	140.0	60.0	93.5	183.0	171.0
30.9	167.0	61.0	95.0	182.0	164.0
50.5	174.0	"	97.2	180.0	164.0
69.5	180.0	"	100.0	172.0	168.5
85.2	183.5	130.0			
(1+8)					

Palmitic acid ($C_{16}H_{32}O_2$) + Hyodesoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0	62.0	60.5	50.2	175.0	59.0
9.9	141.7	59.0	60.3	179.5	"
20.2	157.5	"	69.5	183.5	"
29.7	164.0	"	79.6	187.8	"
40.6	170.5	"	89.9	191.5	64.5
			100.0	196.5	193.5

Palmitic acid ($C_{16}H_{32}O_2$) + Apocholic acid
($C_{24}H_{42}O_4$)

Rheinboldt, 1929

%	f. t.	m. t.	%	f. t.	m. t.
0.0	62.5	61.5	90.0	179.5	157.0
10.0	141.0	61.0	93.4	178.0	162.0
32.0	162.0	"	94.6	177.5	161.5
49.8	171.0	"	96.8	176.0	161.5
69.7	176.5	"	100.0	172.0	167.5
85.8	179.0	122.5			
(1+8)					

Margoric acid ($C_{17}H_{34}O_2$) + Isomargoric acid
($C_{17}H_{34}O_2$)

von Sydow, 1954

%	f. t.
0	61
E	53
100	60

Margaric acid ($C_{17}H_{34}O_2$) + Stearic acid
($C_{18}H_{36}O_2$)

Shriner, Fulton and Burks, jr, 1933

mol%	f. t.	mol%	f. t.
100	68.40	40	60.65
90	66.90	30	59.95
80	65.30	20	59.35
70	63.75	10	59.30
60	62.30	0	59.35
50	61.40		

Smith, 1936

mol%	f. t.	mol%	f. t.
0.0	61.19	46.9	62.17
4.0	61.08	49.95	62.36
9.15	60.93	51.85	62.51
17.4	60.76	54.3	62.68
21.7	60.67	56.0	62.76
23.15	60.66	57.2	62.97
24.5	60.72	64.9	64.15
26.3	60.83	71.5	65.16
30.85	61.17	77.2	66.16
34.0	61.36	85.95	67.44
37.15	61.56	96.35	68.87
40.7	61.77	100.00	69.42
44.05	62.00		

Margaric acid ($C_{17}H_{34}O_2$) + Isostearic acid
($C_{18}H_{36}O_2$)

von Sydow, 1954

%	f. t.
0	61
E	55
100	68

Margaric acid ($C_{17}H_{34}O_2$) + Isoeicosanoic acid
($C_{20}H_{40}O_2$)

von Sydow, 1954

%	f. t.
0	61
E	52.5
(1+1)	55
E	54
100	74

Isomargaric acid ($C_{17}H_{34}O_2$) + Stearic acid
($C_{18}H_{36}O_2$)

von Sydow, 1954

%	f. t.
0	60
E	48
100	70

Stearic acid ($C_{18}H_{36}O_2$) + Eicosanoic acid
($C_{20}H_{40}O_2$)

Morgan and Bowen, 1924

%	f. t.	%	f. t.
100	75.0	45	63.5
80	70.5	40	63.3
75	69.0	33.3	62.7
66.7	67.0	25	62.3
60	64.5	20	63.5
52.5	63.5	9.8	66.7
50	63.5	0	69.0

von Sydow, 1954

%	f. t.
0	70
(1+1)	60 (noncongruent)
E	59
100	74

Stearic acid ($C_{18}H_{36}O_2$) + Behenic acid
($C_{22}H_{44}O_2$)

Twitchell, 1914

%	f. t.	m. t.	%	f. t.	m. t.
0	69.30	69.04	80	75.81	-
5	-	66.80	60	71.04	-
10	67.29	65.26	100	79.99	-

Stearic acid ($C_{18}H_{36}O_2$) + Lignoceric acid
($C_{24}H_{48}O_2$)

Meyer, Brod and Soyka, 1913

%	f. t.	%	f. t.
100	79.5-80	44.1	65.5-67
90.7	74 -75	40.1	65 -66
83	72.5-73	35.4	63.5-64.5
71.1	70 -71	30	63 -64
65.5	68 -68.5	24.3	63.2-64
60.1	67 -68	16.8	65.3-66.5
55.4	66.5-67.5	9.2	66.5-67
50	66 -67.5	0	69

Stearic acid ($C_{18}H_{36}O_2$) + Isopentacosanoic acid
($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f. t.
0	70
E	60
100	82

Stearic acid ($C_{18}H_{36}O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Carlinfanti and Levi-Malvano, 1909

%	f. t.	m. t.	%	f. t.	m. t.
100	9	-	45	58.65	45
95	23.45	-	35	61.25	-
85	34.25	-	25	63.40	57
75	46.6	-	15	65.40	-
65	51.90	34	5	67.15	-
64	55.95	-	0	68.2	-

Fokin, 1912

%	f. t.	%	f. t.
100	5.5	40	59.8
90	29.5	30	62.3
80	40.2	20	64.5
80	47.7	10	66.3
60	52.9	0	68.0
50	56.8		

Meldrum, 1913

%	f. t.	%	f. t.
100	8	40	47.6
80	30.5	30	49.7
70	36.6	20	51.6
60	41.2	10	53.3
50	44.7	0	54.8

Twitchell, 1914

%	f. t.	m. t.
0	69.30	69.04
10	67.27	67.24
20	65.37	65.35
60	-	54.47

Efremov, 1929 - 1930

%	f. t.	E	min.
0	67.7	-	-
5	67.1	6.5	90
10	66.5	"	180
15	65.8	"	240
20	64.5	"	300
25	63.6	"	360
30	62.7	"	390
35	61.8	"	450
40	60.7	"	510
45	59.5	"	570
50	58.3	"	600
55	56.6	"	660
60	54.9	"	720
65	52.7	"	810
70	50.5	"	840
75	47.3	"	870
80	43.5	"	930
85	39.2	"	960
90	33.5	"	990
95	23.7	"	1020
97.5	6.5	"	-
100	9.1	"	-

E: 98% 6.5°

Koczy and Griengl, 1931

%	f. t.	m. t.	%	f. t.	m. t.
0	68.0	66.0	60	55.0	51.5
10	67.0	64.5	70	51.0	47.0
20	66.0	62.5	80	45.0	40.5
30	64.0	60.5	90	36.0	30.5
40	61.7	58.0	100	14.0	9.0
50	58.5	55.2			

Paquot and Durrenberger, 1951

mol%	f. t.	mol%	f. t.
0	61.9	84.2	28.3
9.9	59.6	89.0	17.8
18.7	57.5	90.5	13.4
28.4	55.0	93.0	10.8
38.3	52.3	93.6	10.4
47.7	49.3	94.1	10.4
58.4	44.9	95.3	10.5
68.1	39.9	96.9	10.9
73.7	36.4	98.5	11.5
79.4	32.4	100	12.3

Ravitch and Volnova, 1952 (fig.)

%	f. t.	%	f. t.
0	68	80	42
20	65	99	7
40	60	100	11
60	55		

Pascal, 1914

%	n_D	$\alpha \cdot 10^5$ *
70°		
0	1.4335	39
13.47	.4344	42
25.30	.4354	44
40.00	.4365	47
55.95	.4377	48
69.42	.4386	50
80	.4391	50
90	.4399	48
100	.4415	44

$$* n^t = n^{70} - \alpha (t - 70)$$

Stearic acid ($C_{18}H_{36}O_2$) + Isooleic acid
($C_{18}H_{34}O_2$)

Koczy and Griengl, 1931

%	f. t.	m. t.
0	68.0	66.0
10	66.5	64.5
20	64.5	62.5
30	63.0	60.5
40	61.0	59.0
50	59.5	57.0
60	57.0	55.0
70	53.5	51.0
80	49.0	45.0
85.45	45.5	41.5
90	42.5	38.0
95	43.5	39.5
100	45.0	40.0

Stearic acid ($C_{18}H_{36}O_2$) + Elaidic acid
($C_{18}H_{34}O_2$)

Efremov, 1929 - 1930

%	f. t.	E	min.
0	67.7	-	-
2.5	67.5	-	-
5.0	67.0	-	-
7.5	66.5	-	-
10	66.1	35.2	2
15	65.7	36.2	40
20	64.5	36.7	140
25	63.4	26.9	200
30	62.5	37.0	280
35	61.6	37.5	320
40	60.0	"	400
45	58.8	"	450
50	57.5	"	520
55	56.3	"	560
60	54.8	"	620
65	53.4	"	680
70	51.5	"	760
75	50.0	"	800
80	47.9	"	880
85	44.3	37.4	920
87.5	41.5	37.2	960
90	37.5	37.0	1000
92.5	39.2	-	-
95	41.5	-	-
97.5	43.8	-	-
100	45.4	-	-

$$E : 90.4\% \quad 37.5^\circ$$

Stearic acid ($C_{18}H_{36}O_2$) + Linoleic acid
($C_{18}H_{32}O_2$)

Koczy and Griengl, 1931

%	f. t.	m. t.	%	f. t.	m. t.
0	68.0	66.0	60	55.0	52.0
10	66.5	64.5	70	50.5	47.0
20	65.0	62.7	80	45.0	41.0
30	63.0	60.5	90	36.0	30.0
40	60.5	58.2	95	26.5	16.5
50	58.0	55.0	100	-12.0	-15.0

Paquot and Mercier, 1951

%	f. t.	%	f. t.
100	-6.7	49.2	+57.6
99.285	-6.9	44.2	59.1
98.92	-7.05	40.5	60.2
98.23	+9.0	38.9	60.55
94.8	18.6	35.6	61.35
91.4	29.0	27.5	63.2
87.7	35.4	25.4	63.7
81.2	42.35	23.1	64.15
74.6	47.4	13.1	66.4
67.0	51.8	4.5	68.0
59.7	54.3	0	68.7
53.9	56.1		

Stearic acid ($C_{18}H_{36}O_2$) + α -Oxystearic acid
($C_{18}H_{36}O_3$)

Efremov, 1929-30

%	f. t.	m. t.	%	f. t.	m. t.
0	67.7	-	55	61.7	57.5
5	65.7	64.5	60	64.4	58.8
10	63.7	61.4	65	67.2	61.0
15	62.0	59.0	70	70.0	63.5
20	60.0	57.8	75	73.0	66.4
25	58.5	56.4	80	75.7	69.6
30	57.0	55.5	85	78.5	73.5
35	55.9	55.2	90	81.4	77.5
40	55.5	55.0	95	84.4	82.4
45	57.1	55.7	100	87.2	-
50	59.0	56.5			

E: 39.5% 55°

Stearic acid ($C_{18}H_{36}O_2$) + α,β -Dioxystearic acid
($C_{18}H_{36}O_4$)

Efremov, 1929-30

%	f. t.	m. t.	%	f. t.	m. t.
0	67.7	-	55	82.5	72.5
5	66.8	64.6	60	88.3	76.4
10	65.5	62.4	65	93.5	81.1
15	63.7	60.9	70	98.4	86.2
20	61.6	60.2	75	103.0	92.0
25	60.4	60.4	80	107.2	95.2
30	60.8	60.0	85	111.6	104.0
35	63.5	62.0	90	115.5	110.0
40	67.5	63.9	95	119.6	116.7
45	72.2	66.5	100	123.3	-
50	76.9	69.3			

E: 27.5% 60°

Stearic acid ($C_{18}H_{36}O_2$) + Hydrocinnamic acid
($C_9H_8O_2$)

Eykman, 1889

%	D f. t.
1.633	-0.475
3.89	1.15
9.66	2.81
15.18	4.355
19.6	5.60

Stearic acid ($C_{18}H_{36}O_2$) + Suberic acid
($C_8H_{14}O_4$)

Efremov, 1929-30

%	f. t.	E	min.
0	67.7	-	-
5	66.0	64.2	-
10	64.0	60.0	-
15	61.5	56.2	-
20	58.5	52.4	-
25	55.1	48.4	-
30	51.5	45.1	160
35	47.1	45.1	520
40	54.5	45.3	500
45	63.7	45.3	410
50	72.9	45.3	310
55	81.8	45.3	240
60	90.3	42.2	180
65	98.8	36.6	100
70	107.0	-	-
75	114.7	-	-
80	121.3	-	-
85	127.2	-	-
90	132.0	-	-
95	136.2	-	-
100	139.0	-	-

E: 35.8% 47.5°

Stearic acid ($C_{18}H_{36}O_2$) + Cholic acid
($C_{26}H_{48}O_5$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	69.0	67.5	59.6	182.2	61.0
5.2	143.5	61.0	70.0	185.0	"
10.1	156.5	"	79.4	187.8	"
20.0	168.0	"	89.7	191.5	"
30.5	173.2	"	95.1	193.0	61.7
38.9	175.7	"	100.0	195.0	193.0
49.8	179.0	"			

Stearic acid ($C_{18}H_{36}O_2$) + Desoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f. t.	m. t.	%	f. t.	m. t.
0.0	69.5	68.0	90.0	186.0	175.5
10.0	150.0	67.0	92.6	185.5	170.0
30.0	170.0	68.0	95.0	184.0	165.0
50.4	178.5	"	97.0	182.0	"
70.0	184.0	"	100.0	172.0	168.5
85.0	185.5	140.0			

(1+8)

Stearic acid ($C_{18}H_{36}O_2$) + Hyodesoxycholic acid
($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f.t.	E	%	f.t.	E
0.0	69.0	67.5	50.0	178.5	65.5
4.2	143.5	65.5	59.9	182.0	"
10.4	156.0	"	70.0	186.0	"
19.8	164.5	"	80.0	189.5	"
29.6	169.5	"	89.6	192.5	70.5
39.7	174.7	"	100.0	196.5	193.5

Stearic acid ($C_{18}H_{36}O_2$) + Apocholic acid
($C_{24}H_{38}O_4$)

Rheinboldt, 1929

%	f.t.	m.t.	%	f.t.	m.t.
0.0	69.5	68.0	90.0	180.5	172.0
11.1	148.0	67.0	92.2	181.0	168.0
30.1	164.0	67.5	95.0	179.5	164.0
50.5	173.0	68.0	96.9	178.0	"
69.8	177.8	"	100.0	172.0	167.5
85.3	180.0	133.0			

(1+8)

Stearic acid ($C_{18}H_{36}O_2$) + Trichloroacetic acid
($C_2HCl_3O_2$)

Pushin and Rikovski, 1940-46

mol%	f.t.	m.t.	mol%	f.t.	m.t.
100	57	-	40	50	17
90	50	24	30	56	20
80	41	26	20	61	-
70	29	29	10	65	-
60	36	22	0	69	-
50	43	19			

Nonadecanoic acid ($C_{19}H_{38}O_2$) + Isoeicosanoic
acid ($C_{20}H_{40}O_2$)

von Sydow, 1954

%	f.t.
0	69
E	64
100	74

Nonadecanoic acid ($C_{19}H_{38}O_2$) + Isopentacosanoic
acid ($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f.t.
0	69
E	62
(1+1)	64 (noncongruent)
100	82

Nonadecanoic acid ($C_{19}H_{38}O_2$) + Isohexacosanoic
acid ($C_{26}H_{52}O_2$)

von Sydow, 1954

%	f.t.
0	69
E	62
100	87

9-Methylstearic acid ($C_{19}H_{38}O_2$) d + 1

Hallgren, 1956 (fig.)

mol%	f.t.	mol%	f.t.
0	12.7	20	36
1.5	12.5 E	30	37.5
3	20	50	39
10	31		

9-Methylstearic acid (+) ($C_{19}H_{38}O_2$) +
10-Methylstearic acid (+) ($C_{19}H_{38}O_2$)

Hallgren, 1956 (fig.)

mol%	f.t.	mol%	f.t.
0	12.7	30	12
10	11.5	40	18
20	9.5 E	50	18.7

9-Methylstearic acid (+) ($C_{19}H_{38}O_2$) +
10-Methylstearic acid (-) ($C_{19}H_{38}O_2$)

Hallgren, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	12.7	20	8.5
10	10.5	50	2.2

Eicosanoic acid ($C_{20}H_{40}O_2$) + Lignoceric acid
($C_{24}H_{48}O_2$)

Meyer, Brod and Soyka, 1913

%	f. t.	%	f. t.
100	80	45.2	68.5
90.9	76	40.6	68
83.0	73.5	35.1	68
76.5	72.5	30.5	68.5
70	71.5	25.3	68.5
64.6	70	17.9	69
59.2	70	10.1	71
50	69	0.0	75

Eicosanoic acid ($C_{20}H_{40}O_2$) + Isopentacosanoic
acid ($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f. t.
0	75
E	68
(1+1)	69
E	68.5
100	82

Eicosanoic acid ($C_{20}H_{40}O_2$) + Isohexacosanoic
acid ($C_{26}H_{52}O_2$)

von Sydow, 1954

%	f. t.
0	75
E	67
(1+1)	68 (uncongruent)
100	87

Heneicosanoic acid ($C_{21}H_{42}O_2$) +
Isotricosanoic acid ($C_{23}H_{46}O_2$)

Chibnall, Piper and Williams, 1936

mol%	f. t.
0	74.26
90	78.0
100	79.46

Heneicosanoic acid ($C_{21}H_{42}O_2$) +
Isopentacosanoic acid ($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f. t.
0	74
E	73
(1+1)	75
E	73.5
100	82

Heneicosanoic acid ($C_{21}H_{42}O_2$) +
Isohexacosanoic acid ($C_{26}H_{52}O_2$)

von Sydow, 1954

%	f. t.
0	74
E	67
(1+1)	69
E	68
100	87

Behenic acid ($C_{22}H_{44}O_2$) + Tricosanoic acid
($C_{23}H_{46}O_2$)

Chibnall, Piper and Williams, 1936

%	f. t.	%	f. t.
0	80.2	80	77.7
10	78.8	90	78.3
20	77.8	100	79.6
30	76.6		

Behenic acid ($C_{22}H_{44}O_2$) + Tetracosanoic acid
($C_{24}H_{48}O_2$)

Chibnall, Piper and Williams, 1936

mol%	f. t.	mol%	f. t.
0	80.2	40	75.5
10	78.4	50	75.7
20	75	100	84.2
30	74.6		

Behenic acid ($C_{22}H_{44}O_2$) + Isopentacosanoic acid
($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f. t.
0	80
E	72.5
(1+1)	73
E	71
100	82

Behenic acid ($C_{22}H_{44}O_2$) + Isohexacosanoic acid
($C_{26}H_{52}O_2$)

von Sydow, 1954

%	f. t.
0	80
E	71.5
(1+1)	73
E	70
100	87

Behenic acid ($C_{22}H_{44}O_2$) + Isobehenic acid
($C_{22}H_{44}O_2$)

Meyer, Brod and Soyka, 1913

%	f. t.	%	f. t.
100	75.0	33	76.5
91	75.0	19.1	78.5
82.4	74.5	0	84.0
69.9	76.5		

Behenic acid ($C_{22}H_{44}O_2$) + Oleic acid ($C_{18}H_{34}O_2$)

Twitchell, 1914

%	f. t.
20	75.71
0	79.99

Behenic acid ($C_{22}H_{44}O_2$) + Erucic acid ($C_{22}H_{42}O_2$)

Mascarelli and Sanna, 1915

%	f. t.	E	%	f. t.
100	33.34	-	69.68	63.0
99.02	33.19	-	61.19	67.0
98.12	33.05	-	51.88	69.59
95.80	33.38	-	41.15	72.31
94.25	38.1	33.1	29.07	74.9
91.17	44.9	"	13.24	77.5
87.09	50.9	"	3.93	78.65
79.42	57.8	-	0	79.25

Behenic acid ($C_{22}H_{44}O_2$) + Brassidic acid
($C_{22}H_{42}O_2$)

Mascarelli and Sanna, 1915

%	f. t.	E	%	f. t.
100	58.30	-	56.94	70.0
97.55	57.97	-	49.44	71.35
96.08	57.76	-	45.17	72.3
94.30	57.50	-	39.98	73.1
90.88	57.06	-	31.32	74.5
86.89	59.2	57.25	24.98	75.4
82.86	61.0	"	16.69	76.6
79.17	62.5	"	9.07	77.5
72.80	65.2	"	0	79.2
64.74	67.1	-		

Behenic acid ($C_{22}H_{44}O_2$) + Isoerucic acid
($C_{22}H_{42}O_2$)

Mascarelli and Sanna, 1915

%	f. t.	%	f. t.
100	51.50	55.62	71.3
99.26	52.4	37.95	73.8
96.60	54.4	27.57	75.2
91.40	57.7	18.04	76.8
82.88	61.15	7.71	78.2
70.05	66.7	0	79.2
60.43	69.8		

TRICOSANOIC ACID + TETRACOSANOIC ACID

1211

Tricosanoic acid (C ₂₃ H ₄₆ O ₂) + Tetracosanoic acid (C ₂₄ H ₄₈ O ₂)				Tetracosanoic acid (C ₂₄ H ₄₈ O ₂) + Isopentacosanoic acid (C ₂₅ H ₅₀ O ₂)			
Chibnall, Piper and Williams, 1936				von Sydow, 1954			
mol%		f. t.		%		f. t.	
0		79.6		0		84	
10		79.2		E		77	
20		79.0		100		82	
Tricosanoic acid (C ₂₃ H ₄₆ O ₂) + Pentacosanoic acid (C ₂₅ H ₅₀ O ₂)				Tetracosanoic acid (C ₂₄ H ₄₈ O ₂) + Hexacosanoic acid (C ₂₆ H ₅₂ O ₂)			
Chibnall, Piper and Williams, 1936				Piper, 1937 (fig.)			
mol%		f. t.		%		f. t.	
0		79.6		0		83.75	
10		78.0		20		80	
15		77.1		28		78	
20		76.3		40		79	
30		76.3				45	
		50				60	
		60				80	
		70				80	
		80				88	
		90					
		100					
Tricosanoic acid (C ₂₃ H ₄₆ O ₂) + Isopentacosanoic acid (C ₂₅ H ₅₀ O ₂)				Tetracosanoic acid (C ₂₄ H ₄₈ O ₂) + Isohexacosanoic acid (C ₂₆ H ₅₂ O ₂)			
von Sydow, 1954				von Sydow, 1954			
%		f. t.		%		f. t.	
0		79		0		84	
(1+1)		78.5 (noncongruent)		(1+1)		76.5 (noncongruent)	
E		78		E		75	
100		82		100		87	
Tricosanoic acid (C ₂₃ H ₄₆ O ₂) + Isohexacosanoic acid (C ₂₆ H ₅₂ O ₂)				Tetracosanoic acid (C ₂₄ H ₄₈ O ₂) + Lignoceric acid (C ₂₄ H ₄₈ O ₂)			
von Sydow, 1954				Meyer, Brod and Soyka, 1913			
%		f. t.		%		f. t.	
0		79		0		86	
E		73		12.3		84	
(1+1)		74.5		20		83	
E		73		25.1		82.8	
100		87		32.6		82	
				39.5		81.5	
				45.6		81.5	
				52.7		81	

Pentacosanoic acid ($C_{25}H_{50}O_2$) + Isopentacosanoic acid ($C_{25}H_{50}O_2$)

von Sydow, 1954

%	f. t.
0	83
E	75
100	82

Pentacosanoic acid ($C_{25}H_{50}O_2$) + Isohexacosanoic acid ($C_{26}H_{52}O_2$)

von Sydow, 1954

%	f. t.
0	83
E	80
100	87

Pentacosanoic acid ($C_{25}H_{50}O_2$) + Heptacosanoic acid ($C_{27}H_{54}O_2$)

Chibnall, Piper and Williams, 1936

mol%	f. t.	mol%	f. t.
100	87.7	30	80.7
50	81.1	0	83.4

3-Methyltetracosanoic acid ($C_{25}H_{50}O_2$) d + l

Stallberg-Stenhagen, 1948 (fig.)

%	f. t.	%	f. t.
100	65.6	70	67.5
90	64.5	60	68.5
88	60	50	69
85	64.8	0	65.4
80	66.5		

Hexacosanoic acid ($C_{26}H_{52}O_2$) + Octacosanoic acid ($C_{28}H_{56}O_2$)

Piper, Chibnall and Williams, 1934

mol%	f. t.
0	88.0
50	83.5
100	91.1

Piper, 1937 (fig.)

%	f. t.	%	f. t.
0	88	47	83.5
20	83.75	60	84.5
30	83	80	87.5
40	83.5	100	91

Heptacosanoic acid ($C_{27}H_{54}O_2$) + Octacosanoic acid ($C_{28}H_{56}O_2$)

Piper, Chibnall and Williams, 1934

mol%	f. t.
0	87.7
50	87.6
100	91.1

Heptacosanoic acid ($C_{27}H_{54}O_2$) + Nonacosanoic acid ($C_{29}H_{58}O_2$)

Piper, Chibnall and Williams, 1934

(1+1) f. t. = 85.2°

Octacosanoic acid ($C_{28}H_{56}O_2$) + Triacosanoic acid ($C_{30}H_{60}O_2$)

Piper, Chibnall and Williams, 1937 and Piper 1937 (fig.)

%	f. t.	%	f. t.
0	90.8-91.1	50	87.1-87.3
2.5	90.4-90.6	60	87.6-87.8
5	90.0-90.2	75	89.8-90.1
10	88.7-88.9	90	92.0-92.2
25	86.6-86.8	95	92.6-92.8
30	86.3-86.5	97.5	93.1-93.3
40	86.7-86.9	100	93.8-94.0

Montanic acid ($C_{29}H_{58}O_2$) + Apocholic acid ($C_{28}H_{56}O_4$)						Piper, 1937 (fig.)					
Rheinboldt, 1926											
%	f. t.	m. t.	%	f. t.	m. t.	%	f. t.	%	f. t.		
0.0	83.0	80.5	74.5	189.5	83.0	0	96.25	55	93.4		
10.3	160.0	79.0	83.7	190.0	155.0	20	93.5	60	93.6		
20.4	172.5	"	89.5	189.0	162.0	30	92.5	80	96		
30.0	180.0	"	94.6	185.0	162.5	40	93	100	98.5		
44.8	185.0	80.0	100.0	172.0	166.0						
60.4	187.5	"									
(1 + 8)						9.10-Epoxy stearic acid ($C_{18}H_{34}O_3$) cis + trans					
Triacontanoic acid ($C_{30}H_{60}O_2$) + Dotriacontanoic acid ($C_{32}H_{64}O_2$)						Witnauer and Swern, 1950					
Piper, Chibnall and Williams, 1934						mol%	f. t.	m. t.	mol%	f. t.	n. t.
						0.0	58.7	58.0	58.34	49.2	45.8
						6.72	57.6	55.8	79.52	51.9	47.4
						25.16	54.5	46.5	94.03	54.5	49.0
						48.37	50.4	46.3	100	55.0	54.1
						48.42	50.0	45.9			
						Ketostearic acid ($C_{18}H_{34}O_3$) 9 + 10					
						G.M. Robinson and R. Robinson, 1926					
Piper, 1937 (fig.)						%	f. t.	%	f. t.		
%	f. t.	%	f. t.			100	80.14	57.15	70.65		
0	93.75	51	90.3			83.69	77.17	54.80	69.97		
20	90.5	60	91			70.49	74.31	52.82	69.63		
30	89.5	80	93.75			69.14	73.99	51.13	69.60		
40	90	100	96.25			67.34	73.61	49.65	69.59		
						64.04	72.77	44.35	69.73		
						61.93	72.19	41.28	70.89		
						59.61	71.50	39.67	71.40		
						58.12	70.99	35.79	72.42		
						9.10-Dioxystearic acid ($C_{18}H_{32}O_4$) 1 + 2					
Dotriacontanoic acid ($C_{32}H_{64}O_2$) + Tetratriacontanoic acid ($C_{34}H_{68}O_2$)						Witnauer and Severn, 1950					
Piper, Chibnall and Williams, 1934						mol%	f. t.	m. t.	mol%	f. t.	m. t.
						100.9	131.0	130.7	25.17	94.7	92.5
						90.68	128.4	124	15.20	93.1	92.1
						75.58	125.8	115	7.32	93.7	92.9
						48.25	117.5	92	0	95.1	94.7
						31.61	110.9	92			

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 1 + 2

Nicolet and Cox, 1922 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	153	-	60	165.2	162
10	157.8	153.5	70	165.6	163.6
20	161.6	154	80	167.2	166
30	162	157.8	90	168.6	167.8
40	164	160.2	100	170	-
50	164.6	161.8			

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 1 + 3

Nicolet, 1922 (fig.)

%	f. t.
0	153
80	140
90	142.1
100	144.5

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 1 + 4

Nicolet and Cox, 1922 (fig.)

%	f. t.	%	f. t.
0	153	90	136.6
80	137	95	136.2
85	136.9	100	135

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 2 + 3

Nicolet and Cox, 1922 (fig.)

%	f. t.	%	f. t.
0	170	90	142
80	143.4	95	143.2
85	142	100	144.5

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 2 + 4

Nicolet and Cox, 1922 (fig.)

%	f. t.	%	f. t.
0	170	90	141.6
80	144.5	95	138.9
85	143.8	100	135

Tetraoxystearic acid ($C_{18}H_{36}O_6$) 3 + 4

Nicolet and Cox, 1922 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	144.5	-	60	140.2	137.4
10	144.2	142.4	70	139.6	136.8
20	144	140.8	80	138.6	135.6
30	143	139.8	90	137.4	135.2
40	142	138.6	100	135	-
50	141.2	138			

Crotonic acid ($C_4H_6O_2$) α + β

Morrell and Hanton, 1904

%	f. t.	%	f. t.
100	14.96	56.47	17.25
90.5	9.6	51.8	22.64
83.2	5.28	47.0	28.64
77.35	1.95	41.4	33.64
74.7	-0.25	36.1	38.87
72.05	-1.25	36.8	43.96
69.6	-0.65	26.9	47.52
67.3	+6.48	18.2	55.71
63.95	10.5	0	71.96
59.97	14.7		

Crotonic acid ($C_4H_6O_2$) + Chloroacetic acid
($C_2H_3O_2Cl$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	71.0	53.2	29.9
8.8	64.4	61.4	36.5
16.6	57.7	70.0	42.6
24.6	50.7	80.1	50.0
34.1	41.1	89.6	55.8
43.5	30.9	100	61.4

Crotonic acid ($C_4H_6O_2$) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Kendall, 1914

mol%	f.t.	mol%	f.t.
0	71.0	52.6	+5.1
6.4	65.5	59.6	-9.7
13.2	59.1	69.0	-18.5
19.4	52.6	82.9	-4.2
28.9	41.4	91.1	+2.7
34.7	34.0	100	9.7
44.2	20.5		

Crotonic acid ($C_4H_6O_2$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1914

mol%	f.t.	mol%	f.t.
0	71.0	54.9	-12.7
9.0	63.7	59.3	+1.2
17.3	53.9	65.6	16.4
24.3	44.2	73.4	30.4
34.3	27.5	80.9	40.3
40.0	16.1	89.8	49.6
45.8	+2.1	100	57.3
50.1	-9.9		

Oleic acid ($C_{18}H_{34}O_2$) + Isooleic acid ($C_{18}H_{34}O_2$)

Koczy and Griengl, 1931

%	f.t.	m.t.	%	f.t.	m.t.
0	14.0	9.0	60	37.5	33.0
10	20.0	15.0	70	39.0	34.5
20	25.5	20.0	80	41.0	36.0
30	30.0	25.0	90	42.5	37.8
40	33.5	29.0	100	45.0	40.0
50	36.0	31.0			

Oleic acid ($C_{18}H_{34}O_2$) + Elaidic acid ($C_{18}H_{34}O_2$)

Griffiths and Hilditch, 1932 (fig.)

%	f.t.	%	f.t.
100	44	27.5	28
90	42.5	20	23
80	42	17.5	19
74	40	10	14
60	37.5	5	12
48	35	2.5	13
40	33	0	14

Oleic acid ($C_{18}H_{34}O_2$) + Linoleic acid
($C_{18}H_{32}O_2$)

Koczy and Griengl, 1931

%	f.t.	%	f.t.
100	-16.0	40	3.0
90	-12.0	30	5.0
80	-9.0 ^{sic.}	20	7.0
70	-6.0	10	9.0
60	-3.0	0	9.0
50	0.0		

Paquet and Mercier, 1951

%	f.t.	%	f.t.
100	-6.7	61.5	-8.1
81.9	-8.0	59.1	-7
87.6	-8.7	57.5	-6.5
81.8	-10.0	55.1	-5.6
77.2	-11.5	53.8	-5.25
75.0	-12.1	51.7	-4.3
74.35	-12.25	47.6	-3.15
74.14	-12.3	38.4	+0.3
73.50	-12.15	26.8	3.95
72.9	-12.0	15.8	7.15
66.1	-9.5	8.3	9.1
64.9	-9.35	0	12.3

Isooleic acid ($C_{18}H_{34}O_2$) + Linoleic acid
($C_{18}H_{32}O_2$)

Koczy and Griengl, 1931

%	f.t.	%	f.t.
100	-15.0	40	31.5
90	5.0	30	33.5
80	15.5	20	35.5
70	22.5	10	38.0
60	26.0	0	40.0
50	29.0		

Petroselenic acid ($C_{18}H_{34}O_2$) cis + trans

Griffiths and Hilditch, 1932 (fig.)

%	f.t.	%	f.t.
100	53	17.5	27.5
90	52.5	15	26
80	50	13	26.5
70	47	10	27.5
60	46	7.5	28
55	45	5	28.5
40	40	2.5	29
27.5	35	0	30
20	29		

Brassicic acid ($C_{22}H_{42}O_2$) + Erucic acid ($C_{22}H_{42}O_2$)					
Mascarelli and Sanna, 1915					
%	f. t.	E	%	f. t.	
100	33.3	-	36.52	52.7	
93.34	32.3	-	33.58	53.4	
90.59	31.35	-	33.57	53.7	
79.10	33.1	31.7	22.01	55.5	
65.12	44.1	"	10.77	57.2	
52.94	49.1	"	0	58.3	
46.66	51.1	"			
Griffiths and Hilditch, 1932 (fig.)					
%	f. t.	%	f. t.		
0	60	85	38		
15	58	89	35		
20	57	91	32		
25	56	94	32.5		
40	54	95	33		
52.5	51	96	33.5		
60	49	100	34		
74	45				
Keffler and Maiden, 1936					
mol%	f. t.	mol%	f. t.		
0	59.80	83.5	39.10		
13.8	57.85	87.0	36.15		
31.5	55.10	87.0	31.15		
42.8	52.80	89.6	34.20		
57.0	49.65	91.2	31.60		
67.8	46.45	92.0	31.95		
77.5	42.75	95.1	32.60		
81.0	40.70	100	33.25		
Brassicic acid ($C_{22}H_{42}O_2$) + Isoerucic acid ($C_{22}H_{42}O_2$)					
Mascarelli and Sanna, 1915					
%	f. t.	%	f. t.		
100	51.50	43.27	54.32		
87.93	51.50	38.36	55.1		
83.24	51.55	36.97	55.1		
72.42	51.70	34.18	55.5		
63.82	51.80	26.17	56.4		
56.87	52.1	15.71	57.7		
54.04	52.0	8.40	58.2		
51.30	53.19	0	58.3		
47.67	53.67				
Brassicic acid ($C_{22}H_{42}O_2$) + Cholic acid ($C_{26}H_{48}O_5$)					
Rheinboldt, 1929					
%	f. t.	E	%	f. t.	E
0.0	60.0	59.0	59.6	180.5	57.5
5.4	153.0	57.5	68.8	183.8	"
10.1	159.7	"	79.6	187.5	"
20.2	165.5	"	89.7	191.5	58.5
35.3	171.5	"	100.0	195.0	193.0
50.4	177.5	"			
Brassicic acid ($C_{22}H_{42}O_2$) + Hyodesoxycholic acid ($C_{24}H_{40}O_4$)					
Rheinboldt, 1929					
%	f. t.	E			
0.0	60.0	59.0			
10.8	157.5	58.0			
19.8	173.0	"			
30.0	176.5	"			
40.4	179.5	"			
49.9	181.6	"			
60.1	184.5	"			
70.3	190.5	"			
79.8	190.5	"			
89.8	193.0	62.0			
100.0	196.5	193.5			
Erucic acid ($C_{22}H_{42}O_2$) + Isoerucic acid ($C_{22}H_{42}O_2$)					
Mascarelli and Sanna, 1915					
%	f. t.	E	%	f. t.	
0	33.3	-	44.92	40.3	
7.01	32.15	-	52.99	42.7	
11.08	31.15	-	60.87	44.35	
14.54	30.75	-	68.42	46.1	
20.52	30.05	-	76.17	47.7	
28.02	32.85	29.7	84.49	49.2	
36.06	35.6	"	96.79	50.7	
42.88	38.95	"	100	51.2	
Linoleic acid ($C_{18}H_{32}O_2$) t, t, D, 10, 12 + t, t, D, 9, 11					
Witnauer, Nichols and Senti, 1949					
mol%	f. t.	mol%	f. t.		
0	56.8	53	45.0		
5	55.7	55	45.2		
12	54.7	60	46.1		
20	53.3	68	49.0		
32	50.8	78	50.6		
40	49.0	80	51.0		
43	46.0	90	52.3		
50	45.1	100	54.0		

Stearolic acid ($C_{18}H_{32}O_2$) + Cholic acid
 ($C_{24}H_{40}O_5$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	47.5	46.0	60.0	180.8	44.5
5.4	135.2	44.5	69.3	183.8	"
10.2	148.5	"	79.6	187.5	"
20.3	162.0	"	90.1	190.8	46.5
29.2	168.3	"	100.0	195.0	193.0
46.0	176.0	"			

 Stearolic acid ($C_{18}H_{32}O_2$) + Hyodesoxycholic acid
 ($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	47.5	46.0	49.6	170.5	45.5
4.4	127.0	45.5	60.4	177.5	"
10.4	140.5	"	70.1	182.5	"
20.5	149.5	"	80.4	187.5	"
30.4	157.5	"	89.8	192.0	49.0
40.3	164.5	"	100.0	196.5	193.5

 Behenolic acid ($C_{22}H_{40}O_2$) + Cholic acid
 ($C_{24}H_{40}O_5$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	58.0	56.5	49.8	178.5	55.0
4.8	137.0	55.0	60.0	182.5	"
10.4	153.5	"	66.8	185.2	"
20.5	162.7	"	79.6	189.5	"
28.0	167.5	"	89.9	192.5	57.5
39.9	174.0	"	100.0	195.0	195.0

 Behenolic acid ($C_{22}H_{40}O_2$) + Hyodesoxycholic acid
 ($C_{24}H_{40}O_4$)

Rheinboldt, 1929

%	f. t.	E	%	f. t.	E
0.0	57.5	56.0	49.5	173.8	54.0
5.2	115.0	53.7	59.8	178.8	"
10.3	140.0	54.0	70.3	183.2	"
19.7	157.0	"	80.3	187.6	"
29.7	163.5	"	90.0	191.8	61.0
40.3	169.5	"	100.0	196.5	193.5

 Malonic acid ($C_3H_4O_4$) + Trichloroacetic acid
 ($C_2HO_2Cl_3$)

Pushin and Rikovski, 1940-46

mol%	f. t.	E	mol%	f. t.	E
100	57	-	50	106	43
90	51	45.5	30	120	41
80	62.5	46	0	136	-
65	89.5	45.5			

 Succinic acid ($C_4H_6O_4$) + Maleic acid ($C_4H_4O_4$)

Viseur, 1926

%	f. t.	E	%	f. t.	E
100	130.3	-	40	162.2	120.5
85	122.6	120.3	20	174.5	120.6
80	-	120.3	0	182.7	-
60	147.2	120.4			

Grimm, Gunther and Tittus, 1931

mol%	f. t.	E	mol%	f. t.	E
100	130.5	129	50	153.5	117
95.5	-	117	40	161	-
90	125	"	30	168	117
83.5	117	"	20	175	117
80	123	"	14	-	117
70	135	"	10	180	120
60	145	-	0	185	182

 Succinic acid ($C_4H_6O_4$) + Fumaric acid ($C_4H_4O_4$)

Viseur, 1926

%	f. t.	E	%	f. t.	E
100	273.3	273	60	245.4	182
90	262.6	182.5	40	227.8	182
80	255.2	182.5	20	204.7	182.5
70	250.5	183	0	182.7	182.7

Glutaric acid ($C_5H_8O_4$) + Dimethylglutaric acid
($C_7H_{12}O_4$)

Fredga, 1945

mol%	f. t.	mol%	f. t.
100	80.0	50.4	87.0
94.8	75.7	42.2	86.4
90.1	72.0	35.1	84.9
86.2	71.2	27.6	82.7
80.9	77.0	20	86.9
75.0	80.5	10.7	92.1
68.0	83.8	0	97.3
58.2	86.2		
(1+1)			

Glutaric acid ($C_5H_8O_4$) + Mesodimethylglutaric
acid ($C_7H_{12}O_4$)

Fredga, 1944-45

mol%	f. t.	mol%	f. t.
100.0	127.1	41.2	90.0
90.0	122.6	33.5	81.6
80.4	117.8	27.5	82.2
70.4	112.2	20.3	86.9
59.8	105.2	10.2	92.3
50.2	97.5	0.0	97.3

Glutaric acid ($C_5H_8O_4$) + Rac. Dimethylglutaric
acid ($C_7H_{12}O_4$)

Fredga, 1944-45

mol%	f. t.	mol%	f. t.
100	140.9	38.2	95.9
80.6	135.9	32.4	86.8
79.9	130.4	25.7	83.6
70	124.8	16.3	89.1
60.3	117.5	8.5	93.1
50.9	110.0	0	97.5
44.1	103.0		

Adipic acid ($C_6H_{10}O_4$) + Pimelic acid ($C_7H_{12}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	152.0	152.0	55	130.3	115.6
5	150.9	149.2	60	124.8	110.7
10	149.8	146.5	65	118.3	105.6
15	148.8	143.8	70	111.1	100.7
20	147.5	141.2	75	103.3	97.1
25	145.8	138.5	80	96.1	94.5
30	144.1	135.7	85	97.0	95.9
35	142.2	135.5	90	99.9	98.4
40	139.8	129.2	95	102.3	101.1
45	137.2	124.8	100	104.3	103.8
50	134.0	120.5			

Adipic acid ($C_6H_{10}O_4$) + Suberic acid ($C_8H_{14}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	152.0	-	55	124.1	120.0
5	150.8	149.4	60	119.7	119.3
10	149.5	147.1	65	120.1	119.8
15	147.9	144.3	70	124.1	122.2
20	146.2	141.9	75	128.5	124.9
25	144.3	139.5	80	131.9	127.7
30	139.8	134.0	85	134.8	130.5
35	137.4	131.1	90	137.8	133.4
40	137.4	131.1	95	140.2	137.3
45	133.8	127.5	100	141.9	141.4
50	129.2	122.8			

Pimelic acid ($C_7H_{12}O_4$) + Suberic acid ($C_8H_{14}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	104.3	103.8	55	121.3	112.9
5	103.6	100.8	60	124.4	116.0
10	102.2	98.2	65	127.5	119.0
15	100.6	95.8	70	130.2	122.4
20	98.2	95.8	75	132.7	125.5
25	93.6	94.0	80	135.1	128.5
30	102.3	93.2	85	137.2	131.5
35	107.0	98.4	90	139.0	134.8
40	111.1	102.1	95	140.5	138.1
45	114.8	105.8	100	141.9	141.4
50	118.2	109.3			

Pimelic acid ($C_7H_{12}O_4$) + Azelaic acid($C_9H_{16}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	104.3	103.8	55	87.2	84.9
5	103.1	101.4	60	90.1	87.8
10	101.4	99.2	65	92.6	90.4
15	99.6	97.1	70	94.8	93.0
20	97.5	94.5	75	97.0	95.4
25	94.9	92.2	80	99.2	97.9
30	92.7	89.5	85	101.4	100.2
35	90.0	87.0	90	103.4	102.5
40	87.4	84.3	95	105.3	104.6
45	84.1	81.3	100	107.0	106.6
50	82.5	81.3			

Suberic acid ($C_8H_{14}O_4$) + Azelaic acid($C_9H_{16}O_4$)

Ganttter and Hell, 1881

%	f. t.	m. t.	%	f. t.	m. t.
100	106	-	62	109	106
95	104	-	57	109	108
90	103.5	-	51	115	-
86	98.5	-	42	123	-
81	98	-	31	128	124
76	-	98	21	130	125
72	100	98	10	136	135
66	100	99	0	140	-

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	141.9	141.4	55	116.7	110.8
5	140.8	139.0	60	113.0	107.7
10	139.5	136.7	65	108.7	104.4
15	137.8	133.8	70	103.3	100.7
20	135.9	131.0	75	97.7	96.7
25	133.7	128.2	80	100.7	98.4
30	131.0	125.4	85	102.5	100.1
35	128.4	122.6	90	104.1	102.1
40	125.5	119.8	95	105.6	104.2
45	122.7	116.8	100	107.0	106.6
50	119.7	113.8			

Suberic acid ($C_8H_{14}O_4$) + Sebacic acid ($C_{10}H_{18}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	141.9	141.4	55	113.7	112.8
5	140.5	139.3	60	114.0	113.0
10	138.8	137.0	65	117.2	115.3
15	136.9	134.2	70	121.6	118.6
20	134.9	132.0	75	124.8	121.2
25	132.7	129.3	80	127.4	123.8
30	130.4	126.5	85	129.5	126.9
35	127.7	123.7	90	131.2	128.5
40	124.6	120.4	95	132.3	130.6
45	120.6	117.5	100	133.1	132.8
50	116.1	114.5			

Azelaic acid ($C_9H_{16}O_4$) + Sebacic acid ($C_{10}H_{18}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	107.0	106.6	55	115.8	111.1
5	105.9	104.3	60	118.6	114.0
10	104.6	102.2	65	121.2	116.7
15	103.1	100.1	70	123.7	119.3
20	101.3	98.2	75	126.0	121.8
25	98.8	96.8	80	128.0	124.2
30	98.2	96.7	85	129.8	126.4
35	102.5	99.1	90	131.3	128.6
40	106.2	102.2	95	132.4	130.8
45	109.7	105.2	100	133.1	132.8
50	112.9	108.1			

Azelaic acid ($C_9H_{16}O_4$) + 1,11-Undecanedioic acid
($C_{11}H_{20}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	107.0	106.6	55	92.7	90.7
5	106.7	104.6	60	95.1	93.1
10	105.7	102.4	65	97.4	95.4
15	104.1	100.4	70	99.3	97.7
20	102.4	98.4	75	101.4	99.8
25	100.4	96.3	80	103.2	102.0
30	98.2	94.1	85	105.2	104.1
35	95.9	91.7	90	107.0	106.1
40	93.4	89.4	95	108.9	108.2
45	90.6	88.4	100	110.8	110.3
50	89.7	88.5			

Sebacic acid ($C_{10}H_{18}O_4$) + 1.11- Undecanedioic acid ($C_{11}H_{20}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	133.1	132.8	55	113.8	108.0
5	132.6	131.0	60	109.9	104.7
10	131.8	129.0	65	105.6	101.8
15	130.8	126.9	70	100.4	99.0
20	129.7	124.8	75	102.5	100.2
25	128.4	122.7	80	104.4	101.8
30	126.8	120.5	85	106.2	103.5
35	124.9	118.4	90	108.0	105.4
40	122.7	116.3	95	108.5	107.6
45	120.0	113.7	100	110.8	110.3
50	117.0	110.9			

Sebacic acid ($C_{10}H_{18}O_4$) + 1.12-Dodecanedioic acid ($C_{12}H_{22}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	133.1	132.8	55	112.5	111.6
5	132.7	131.0	60	113.7	112.3
10	131.9	129.0	65	116.8	114.0
15	130.0	127.0	70	120.3	116.9
20	129.8	124.9	75	122.9	119.2
25	128.4	122.8	80	124.7	121.2
30	126.6	120.6	85	125.9	122.0
35	123.6	117.8	90	127.2	124.9
40	120.1	115.0	95	128.2	126.8
45	116.0	113.1	100	129.0	128.7
50	112.7	112.0			

1.11-Undecanedioic acid ($C_{11}H_{20}O_4$) +
1.12-Dodecanedioic acid ($C_{12}H_{22}O_4$)

Houston and van Sandt, 1946

%	f. t.	m. t.	%	f. t.	m. t.
0	110.8	110.3	55	116.3	111.8
5	110.2	108.3	60	118.2	114.1
10	109.3	106.2	65	119.8	116.1
15	108.0	104.0	70	121.3	118.2
20	106.0	102.2	75	122.8	120.0
25	103.6	101.2	80	124.2	121.9
30	101.6	100.8	85	125.7	123.8
35	105.2	103.0	90	127.0	125.7
40	108.5	105.2	95	128.2	127.4
45	111.6	107.5	100	129.0	128.7
50	114.3	109.7			

Methylsuccinic acid ($C_5H_8O_4$) d + rac.

Berner and Leonardsen, 1939 (fig.)

%	f. t.	%	f. t.
100	112.5	38	103.5 E
75	111	25	107
50	106.5	0	115

Methylsuccinic acid ($C_5H_8O_4$) (+)
+ Isopropylglutaric acid ($C_8H_{14}O_4$) (-)

Fredga and Miettinen, 1947 (fig.)

mol%	f. t.	mol%	f. t.
0	115	61	89
12	104	65	87.5
20	100	69	87
25	97	75	84
30	92	79	80.5
35	89	82	79
39	89.1	86	81
44	89.5	92	85
49	90	100	89
55	90		(1+1)

Methylsuccinic acid ($C_5H_8O_4$) (+)
+ Isopropylglutaric acid ($C_8H_{14}O_4$) (+)

Fredga and Miettinen, 1947 (fig.)

mol%	f. t.	mol%	f. t.
0	115	61	64
10	106	62	65
20	100	70	69
32	90	80	78
40	83	90	83
50	74	100	89
56	69		

Ethylsuccinic acid ($C_6H_{10}O_4$) (+) +
 α -Methyl- α -ethylsuccinic acid ($C_7H_{12}O_4$) (-)

Porath, 1951

%	f. t.	%	f. t.
100	65.0	50.6	84.5
93.2	59.5	40.9	82.5
90.2	57.0	31.8	80.5
83.5	65.5	25.2	78.0
75.1	75.5	19.2	80.0
69.7	78.5	7.7	89.5
64.3	81.5	0.0	96.5
57.7	83.0		

Ethylsuccinic acid ($C_6H_{10}O_4$) (-) +
 α -Methyl- α -ethylsuccinic acid ($C_7H_{12}O_4$) (-)

Porath, 1951

%	f. t.	%	f. t.
100	65.0	46.0	50.5
94.6	60.5	33.8	65.0
82.8	50.5	27.5	72.5
72.1	41.0	11.2	88.0
64.2	34.5	0.0	96.5
52.9	40.5		

Ethylsuccinic acid ($C_6H_{10}O_4$) (+) +
Methylsulfidesuccinic acid ($C_5H_8O_4S$) (+)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	96	47.3	123.5
4.4	100	57.0	127
8.8	103	67.7	130
18.3	109.5	78.1	134
27.7	114	88.6	138
37.5	119	100.0	143

Ethylsuccinic acid ($C_6H_{10}O_4$) α (-) +
Methylsulfide succinic acid ($C_5H_8O_4S$) (+)

Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	96	47.0	122
2.2	94	52.7	122
4.6	92.5	57.5	120.5
6.6	90.5	62.3	123
9.0	93	67.5	126.5
13.7	106	78.0	132.5
18.1	112.5	88.5	137.5
27.9	118.5	100.0	143
37.1	121.5		

Ethylsuccinic acid ($C_6H_{10}O_4$) rac +
Methylsulfidesuccinic acid ($C_5H_8O_4S$) rac

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	99	57.0	119
9.2	103	67.7	123
18.2	107	78.5	129
27.6	110.5	89.0	133.5
37.2	114	100.0	137.5
48.2	117		

Propylsuccinic acid ($C_7H_{12}O_4$) (+) + Hexylsuccinic
acid ($C_{10}H_{18}O_4$) (+)

Timmermans and Van der Haegen, 1933

mol%	f. t.	m. t.
0	93.9	-
25	91.8	85.7
50	87.7	82.7
75	82.2	80.5
100	83.2	-

Propylsuccinic acid ($C_7H_{12}O_4$) (-) +
Hexylsuccinic acid ($C_{10}H_{18}O_4$) (+)

Timmermans and Van der Haegen, 1933

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	81.3	-	50	95.4	77
90	80.2	76	25	94.4	79
85	86.9	79	10	93.7	80
75	94.2	76	0	93.9	-
(1+1)					

Matell, 1953

mol%	f. t.	mol%	f. t.
100	83	35.2	76
87.1	78	25.8	85.5
76.2	69	17.2	92
65.0	60	7.8	99
53.5	48	0.0	104
44.1	65		

Propylsuccinic acid ($C_7H_{12}O_4$) (+) +
Ethylsulfidesuccinic acid ($C_6H_{10}O_4S$) (+)

Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	104	67.8	117.5
9.4	106.5	78.0	119
18.2	108	83.6	120
28.1	111	89.1	123
37.6	112.5	94.2	125
47.4	114	100.0	127
57.7	116		

Propylsuccinic acid ($C_7H_{12}O_4$) (-) +
Ethylsulfidesuccinic acid ($C_6H_{10}O_4S$) (+)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	104	42.2	97
9.3	98.5	47.2	98
18.4	93.5	51.7	"
23.9	90.5	57.5	99 (1+1)
27.9	89	67.7	109
30.2	91	78.1	115
32.0	92.5	89.0	121
37.4	95	100.0	127

Propylsuccinic acid ($C_7H_{12}O_4$) rac +
Ethylsulfidesuccinic acid ($C_6H_{10}O_4S$) rac

Matell, 1953

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0.0	94	93	47.3	105	93
5.1	93	90.5	57.1	108	97
9.9	95	88	66.1	110	101
18.1	96.5	87.5	78.0	114	105
23.7	98	"	88.0	119.5	109
27.8	99.5	87.5	92.8	122	110.5
38.0	102	89.5	100.0	126.5	120

Isopropylsuccinic acid ($C_7H_{12}O_4$) (+) +
 α -Methyl- α -Isopropylsuccinic acid ($C_8H_{14}O_4$) (+)

Porath, 1949

mol%	f. t.	mol%	f. t.
100.0	127.0	41.9	68.0
87.9	117.5	31.3	69.5
81.4	113.5	29.0	73.0
71.7	107.0	16.3	81.0
62.7	102.5	6.6	85.0
54.9	94.5	0.0	88.0
46.9	87.5		

Isopropylsuccinic acid ($C_7H_{12}O_4$) (-) +
 α -Methyl- α -Isopropylsuccinic acid ($C_8H_{14}O_4$) (+)

Porath, 1949

mol%	f. t.	mol%	f. t.
100.0	127.0	46.4	107.0
93.1	122.5	38.1	106.0
88.2	118.5	29.0	102.0
82.1	117.0	22.9	95.0
75.7	113.5	16.1	87.0
70.2	109.0	8.3	81.5
63.5	106.0	5.2	85.0
59.7	106.5	0.0	88.0
48.6	107.5		

(1+1)

Butylsuccinic acid ($C_8H_{14}O_4$) (+) +
Propylsulfidesuccinic acid ($C_7H_{12}O_4S$) (+)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	83	49.4	80
10.4	82	56.3	94.5
18.2	81	68.6	103
22.9	80.5	78.0	108.5
27.4	80	88.0	114.5
37.7	79.5	100	120
43.6	85.5		

Butylsuccinic acid ($C_8H_{14}O_4$) (-) +
Propylsulfidesuccinic acid ($C_7H_{12}O_4S$) (+)

Matell, 1951 and 1953

mol%	f. t.	mol%	f. t.
0.0	83	41.7	83
9.7	75	43.4	83
14.1	73	46.4	83.5
16.6	71	52.0	90 (1+1)
19.7	72.5	57.0	95
23.3	75	67.9	103
26.8	78.5	78.6	109
30.9	80	84.0	112.5
35.2	82	100.0	120

Butylsuccinic acid ($C_8H_{14}O_4$) rac +
Propylsulfidesuccinic acid ($C_7H_{12}O_4S$) rac

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	83	51.1	92
10.1	81	60.9	98
19.8	87	77.8	106.5
26.1	78	88.3	113
35.5	83	100.0	119.5

Pentylsuccinic acid ($C_9H_{16}O_4$) (+) + (-)

Matell, 1953

mol%	f. t.	mol%	f. t.
50.0	81	18.8	73.5
39.2	79	14.6	76
29.8	77	10.3	78
25.4	76	0.0	83

Pentylsuccinic acid ($C_9H_{16}O_4$) (+) +
Butylsulfidesuccinic acid ($C_8H_{14}O_4S$) (+)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	83	47.7	90
10.4	80	57.0	97
19.4	77.5	67.9	104
27.9	75.5	79.2	110.5
32.6	74	89.4	116
37.3	80.5	100.0	120.5

Pentyl succinic acid ($C_9H_{16}O_4$) (-) +
Butylsulfidesuccinic acid ($C_8H_{14}O_4S$) (-)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	83	38.3	75
9.1	78	48.2	85
18.4	72	57.7	92
23.2	69	67.8	100
28.3	67	82.0	109
33.9	67	100.0	120.5

Pentylsuccinic acid ($C_9H_{16}O_4$) rac +
Butylsulfidesuccinic acid ($C_8H_{14}O_4S$) rac

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	82	52.5	82.5
10.4	81	57.7	86
19.3	80	69.7	93
28.9	79	77.2	96.5
32.4	79	89.1	101
39.0	78.5	100.0	105
47.6	79.5		

Hexylsuccinic acid ($C_{10}H_{18}O_4$) (+) + (-)

Matell, 1953

mol%	f. t.		
	I	II	III
50.0	88	84	77.5
55.3	83	77	-
60.4	81	76	-
70.3	75	-	-
84.9	76.5	73.5	-
89.8	78.5	74.5	-
94.6	81	77	-
100	83	77.5	-

Hexylsuccinic acid ($C_{10}H_{18}O_4$) (-) +
Pentylsulfidesuccinic acid ($C_9H_{16}O_4S$) (+)

Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	83	41.9	86.5
8.9	78	47.3	91.5
18.7	70.5	52.4	96
24.3	66	57.5	99.5
27.3	63.5	67.0	105.5
30.4	62.5	77.7	112.5
32.4	69	83.4	119
35.0	73	100.0	125
37.4	79.5		

Hexylsuccinic acid ($C_{10}H_{18}O_4$) (+) +
Chlorsuccinic acid ($C_4H_5O_4Cl$) (+)

Machtelinckx, 1951

mol%	f. t.	E	mol%	f. t.	E
0	83.8	83.7	40	104.5	80
10	82.5	82.5	55	126	82
20	79.5	79	80	158.5	83
26	79.7	79.5	100	177.5	177.5

Hexylsuccinic acid ($C_{10}H_{18}O_4$) (+) +
Chlorsuccinic acid ($C_4H_5O_4Cl$) (-)

Machtelinckx, 1951

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	83.8	83.7	65	117.5	79
20	82.5	82.5	70	118	82
37.5	90	79.5	80	116	83
55	112.5	79.5	90	146	85
60	115	79	100	177.5	177.5

Hexylsuccinic acid ($C_{10}H_{18}O_4$) rac. +
Pentylsulfidesuccinic acid ($C_9H_{16}O_4S$) rac.

Matell, 1953

mol %	f. t.		mol %	f. t.	
	I	II		I	II
0.0	88	77.5	43.3	88	68.5
5.5	84.5	76.5	47.2	88.5	73.5
9.2	83.5	76	53.3	90.5	79.5
11.9	83.5	75	58.5	84.5	-
14.5	83	-	59.2	91.5	-
18.9	84	83	63.7	93	-
23.1	84.5	-	66.7	93.5	91
26.6	85	70	73.0	95	-
29.3	85	-	78.3	97	-
33.1	86	66.5	87.9	102	-
36.6	86	63.5	100.0	107	-

Hexylsuccinic acid ($C_{16}H_{18}O_4$) (+) +
Pentylsulfidesuccinic acid ($C_9H_{16}O_4S$) (+)

Matell, 1953

mol%	f. t.	mol%	f. t.
0.0	83	44.0	93
12.1	76.5	48.6	96.5
18.6	74	58.5	102.5
22.9	71.5	68.9	110
27.9	75	77.7	114.5
33.5	82.5	89.0	120
36.9	87	100.0	125

α -Methyl- α -ethylsuccinic acid ($C_7H_{12}O_4$) (-) +
 α -Methyl- α -isopropylsuccinic acid ($C_8H_{14}O_4$) (+)

Porath, 1951

%	f. t.	%	f. t.
0	65.0	40.7	127.5
5.3	62.5	49.2	129.0
8.3	60.0	55.9	127.5
11.9	71.5	73.3	124.0
15.1	90.5	81.5	119.0
19.8	109.0	91.4	125.0
25.5	119.0	100.0	127.0
33.5	123.5		

(1+1)

α -Methyl- α -ethylsuccinic acid ($C_7H_{12}O_4$) (-) +
 α -Methyl- α -isopropylsuccinic acid ($C_8H_{14}O_4$) (-)

Porath, 1951

%	f. t.	%	f. t.
0	65.0	47.8	95.5
9.1	63.0	51.2	100.5
14.2	62.0	60.4	105.5
18.3	60.5	63.9	109.5
27.5	66.0	75.3	117.0
33.2	76.0	83.9	120.5
39.1	85.0	100.0	127.0
46.0	95.0		

α -Methyl- α -isopropylsuccinic acid ($C_8H_{14}O_4$) d + l

Porath, 1949

mol%	f. t.	mol%	f. t.
0.0	127.0	27.8	134.0
3.8	124.0	28.7	136.0
7.6	122.5	35.4	140.5
16.3	124.0	43.1	145.0
22.0	128.5	49.5	148.0

α -Methylglutaric acid ($C_6H_{10}O_4$) d + l

Berner and Leonardsen, 1939

%	f. t.	%	f. t.
0	81	30	73.5
10	78	40	76
20	72	50	77
25	71		

Methylglutaric acid ($C_6H_{10}O_4$) (I) (-) +
Dimethylglutaric acid ($C_7H_{12}O_4$) (-)

Fredga, 1947

mol%	f. t.	mol%	f. t.
100.0	80.0	45.6	52.1
90.4	71.8	40.9	55.0
80.1	63.6	30.5	61.4
70.2	57.1	21.5	66.0
64.2	53.0	10.6	71.3
60.8	50.9	6.1	73.9
50.7	49.3	0.0	82.9

Methylglutaric acid ($C_6H_{10}O_4$) (+) +
Dimethylglutaric acid ($C_7H_{12}O_4$) (-)

Fredga, 1947

mol%	f. t.	mol%	f. t.
100	80.0	62.8	82.8
96.5	77.1	55.2	84.0
93.7	74.5	50.1	84.2
89.6	73.3	41.6	83.7
87.8	74.1	33.9	81.3
84.2	75.6	17.5	78.5
82.3	76.2	21.8	74.8
79.1	76.9	16.6	74.7
75.6	77.3	12.1	76.9
72.2	78.5	6.3	79.7
69.2	80.1	0	82.9

(1+1)

Methylglutaric acid ($C_6H_{10}O_4$) (+) +
Methylthiodiglycolic acid ($C_5H_8O_4S$) (+)

Fredga, 1947

mol%	f. t.	mol%	f. t.
100.0	79.4	46.1	58.0
88.7	73.7	37.2	63.8
78.0	69.0	27.0	69.0
68:5	64.7	17.0	74.7
56.6	57.3	0.0	82.9

Methylglutaric acid ($C_6H_{10}O_4$) (+) +
Methylthiodiglycolic acid ($C_5H_8O_4S$) (-)

Fredga, 1947

mol%	f. t.	mol%	f. t.
100.0	79.4	45.7	55.8
98.6	73.9	37.2	62.1
78.9	68.8	26.3	68.8
65.7	61.9	20.4	72.1
57.8	57.2	9.6	77.0
49.5	53.5	0.0	82.9

Methylglutaric acid ($C_6H_{10}O_4$) rac +
Methylthiodiglycolic acid ($C_5H_8O_4S$) rac

Fredga, 1947

mol%	f. t.	mol%	f. t.
100	86.9	42.4	60.7
92.1	82.9	31.5	61.2
78.9	77.5	23.4	65.6
70.3	74.5	14.9	69.5
62.6	71.6	10.8	71.6
51.9	65.4	0.0	76.0

Dimethylglutaric acid ($C_7H_{12}O_4$) (+) + (-)

Fredga, 1947

mol%	f. t.	mol%	f. t.
0.0	80.0	10.0	114.8
1.0	85.9	13.1	120.2
1.9	91.5	16.9	126.0
3.0	94.7	22.6	131.2
4.0	97.0	25.0	133.0
5.0	98.4	27.5	134.6
5.9	102.9	30.1	135.8
6.8	105.8	35.6	137.9
8.1	110.1	41.7	139.7
9.0	113.0	50.0	140.8 (1+1)

Dimethylglutaric acid ($C_7H_{12}O_4$) (+) +
Dilactic acid ($C_6H_{10}O_5$) (-)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	80.0	50.0	91.6
0.7	79.1	56.0	90.8
1.3	79.0	61.9	89.4
2.0	82.1	67.2	87.7
4.3	87.8	75.0	82.9
13.0	94.3	78.2	80.0
25.6	97.2	85.4	82.2
32.4	96.7	90.3	85.9
39.6	94.9	95.2	88.5
43.9	93.3	100.0	91.1 (3+1)

Dimethylglutaric acid ($C_7H_{12}O_4$) (+) +
Dilactic acid ($C_6H_{10}O_5$) (+)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	80.0	57.3	71.8
10.9	79.0	63.0	74.3
22.2	76.9	69.5	76.9
28.9	74.9	75.9	78.8
35.1	72.9	83.8	82.2
42.9	69.5	92.1	86.2
49.9	68.5	100.0	91.1

Dimethylglutaric acid ($C_7H_{12}O_4$) rac +
Dimethylglutaric acid(+)..dilactic acid (-)
($C_{15}H_{22}O_9$)

Fredga, 1941

%	f. t.	m. t.	%	f. t.	m. t.
0.0	91.6	88.5	50.0	127.7	108.5
5.0	99.9	90.0	64.9	132.0	116.3
12.0	107.1	93.2	81.4	136.1	126.9
24.0	116.0	98.0	90.0	138.1	132.2
36.1	122.1	103.0	100.0	140.9	139.1

Dimethylglutaric acid ($C_7H_{12}O_4$) (+) +
Thiodilactic acid ($C_6H_{10}O_4S$) (+)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	80.0	50.0	90.1
10.0	72.5	65.2	100.0
20.2	64.2	82.3	108.7
25.3	66.2	100.0	117.4
35.2	77.9		

Dimethylglutaric acid ($C_7H_{12}O_4$) (+) +
Thiodilactic acid ($C_6H_{10}O_4S$) (-)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	80.0	25.4	100.9
2.3	78.1	35.2	106.0
3.9	76.8	50.0	109.0 (1+1)
5.0	77.0	60.0	107.0
6.2	78.1	64.2	105.6
7.7	79.4	70.4	103.1
10.0	81.0	75.0	102.8
11.9	84.0	79.2	105.2
13.0	85.9	85.2	109.0
14.1	88.0	93.0	113.3
18.4	93.9	100.0	117.4

Dimethylglutaric acid ($C_7H_{12}O_4$) rac +
Dimethylglutaric acid (+) .thiodilactic acid (-)
($C_{12}H_{22}O_8S$)

Fredga, 1941

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100.0	109.0	107.0	51.3	128.1	119.1
90.0	113.8	109.7	33.9	133.0	123.8
77.8	119.0	112.3	17.6	137.0	131.0
64.8	124.0	115.3	0.0	140.9	139.1

α, α^2 -Dimethylglutaric acid ($C_7H_{12}O_4$) (+) +
 α, α^2 -Dimercaptoglutaric acid ($C_7H_8O_4S_2$) (-)

Schotte, 1956 (fig.)

%	f. t.	%	f. t.
0	81	60	83
5	80 E	80	76
10	81.5	88	73 E
20	85	95	80
40	86	100	91
50	85.5		

(1+1)

Fumaric acid ($C_4H_4O_4$) + Maleic acid ($C_4H_4O_4$)

Viseur, 1926

%	f. t.	E
0	130	-
20	126	126.6
40	126	126.5
60	126	126.6
80°	126	126.7
100	273	-

Maleic acid ($C_4H_4O_4$) + Mandelic acid l
($C_8H_8O_3$)

Centnerszwer, 1899

%	f. t.	%	f. t.
100.0	132.9	40.6	128.0
89.7	125.7	30.0	130.0
80.3	119.3	19.8	131.4
70.2	115.3	9.4	133.4
59.8	115.7	0.0	137.2
50.1	122.2		

Malic acid ($C_4H_6O_5$) l + d

Timmermans and Vesselovsky, 1932

mol %	f. t.	E
0	100	-
5	108	100
12.5	116	100
20.0	117	103
22.5	120	104-105
25	119	106
30	125	110
37.5	127	116
50	130	-

MALIC ACID 1 + TARTARIC ACID 1

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Malic acid l (C ₄ H ₆ O ₅) + Tartaric acid l (C ₄ H ₆ O ₆)						Malic acid l (C ₄ H ₆ O ₅) + Chlorsuccinic acid d (C ₄ H ₅ O ₄ Cl)					
Timmermans and Heuse, 1931						Machtelinckx, 1951 and Timmermans and al., 1951					
mol%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	101	99	60	153	125	0	102.8	102.5	37.5	138	97.5
12	119	101	75	161	131	5	107	97	57.5	152.5	108.5
25	134	112	85	166	139	10	110	97.5	67.5	167.5	127.5
40	143	119	100	173	171.5	18	127.5	96	77.5	170	140
50	149	123				27.5	136	97	100	177.5	177.5

Malic acid l (C ₄ H ₆ O ₅) + Tartaric acid d (C ₄ H ₆ O ₆)						Malic acid l (C ₄ H ₆ O ₅) + Chlorsuccinic acid l (C ₄ H ₅ O ₄ Cl)					
Timmermans and Heuse, 1931						Timmermans and Heuse, 1931					
mol%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	101	99	60	163	151	0	101	99	50	157	107
8	134	100	67	161	"	5	107	99	65	165	121
15	144	100	75	163	"	15	124	98.5	75	171	135
25	157	108	85	169	"	25	137	98.5	100	179	177.5
40	163	110	100	174	173	35	147	99.5			
50	164	151	(1+1)								

Malic acid rac. (C ₄ H ₆ O ₅) + Tartaric acid rac. (C ₄ H ₆ O ₆)						Machtelinckx, 1951 and Timmermans and Mokry, 1951					
Lettre, Barnbeck and Staunau, 1936											
%	f. t.	m. t.	%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	131	130	60	184	152	0	102.8	102.5	47.5	146	99.5
10	148	131	70	189	164	5	103	97.5	57.5	152.5	106
20	159	132	80	194	176	10	112.5	"	77.5	167.5	137.5
30	168	135	90	199	191	18	124	"	85	170	147.5
40	176	138	100	205	204	37.5	137	"	100	177.5	177.5
50	182	142									

Malic acid l (C ₄ H ₆ O ₅) + Chlorsuccinic acid d (C ₄ H ₅ O ₄ Cl)						Malic acid d (C ₄ H ₆ O ₅) + Dichlorsuccinic acid d (C ₄ H ₄ O ₄ Cl ₂)					
Timmermans and Heuse, 1931						Van Lancker, 1939					
mol%	f. t.	m. t.	mol%	f. t.	m. t.	mol%	f. t.	E	mol%	f. t.	E
0	101	99	50	159	101	0	104	-	43.0	138	94
7	117	98.5	65	164	120	17.1	116	93	57.1	146	94
15	130	98.5	75	170	129	27.2	128	92	100	168	-
25	140	99	100	178.5	177						
35	147	99.5									

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MALIC ACID d + DICHLORSUCCINIC ACID I

Malic acid d ($C_4H_6O_5$) + Dichlorsuccinic acid I
($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E
0	104	-
19.9	116	90
37.4	132	89
58.0	144	92
100	166	-

Malic acid l ($C_4H_6O_5$) + Chlormalic acid d (I)
($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E
100	174.5	147.0
75	167.6	93.6
50	158.6	93.6
E : 93.7°		

Malic acid l ($C_4H_6O_5$) + Chlormalic acid l (I)
($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E
100	174.5	147.0
75	165.0	94.1
50	160.1	93.8
25	154.4	93.3
10	129.2	92.8
E: 93.7°		

Malic acid l ($C_4H_6O_5$) + Chlormalic acid l (II)

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
100	170.5	144.0	25	144.1	89.1
75	161.6	89.8	10	124.0	88.7
50	152.3	90.2	0	102.5	-

Malic acid l ($C_4H_6O_5$) + Mandelic acid d
($C_8H_8O_3$)

Timmermans and Motiuk, 1932

mol%	f. t.	E
100	133.1	-
75	114.2	85.2
60	107.6	79.0
50	104.2	79.2
20	91.8	77.2
0	101	99

Malic acid l ($C_4H_6O_5$) + Mandelic acid l
($C_8H_8O_3$)

Timmermans and Motiuk, 1932

mol%	f. t.	E
100	133.1	-
50	104.6	80.2
20	99.2	78.6
0	99	99
E = 78		

Malic acid i ($C_4H_6O_5$) + Mandelic acid l
($C_8H_8O_3$)

Centnerszwer, 1899

%	f. t.	%	f. t.
0.0	132.9	60.3	117.9
10.8	127.2	70.0	121.2
20.0	124.4	80.6	124.4
30.1	118.0	89.6	126.9
41.7	114.0	100.0	131.3
50.7	115.7		

Malic acid rac. ($C_4H_6O_5$) + Mandelic acid rac.
($C_8H_8O_3$)

Lettre', Barnbeck and Staunau, 1936

%	f. t.	E	%	f. t.	E
100	119	118	40	122	99
90	114	99	30	125	"
80	107	"	20	128	"
70	105	"	10	130	100
60	112	"	0	131	130
50	117	"			

Tartaric acid d + l ($C_4H_6O_6$)				Tartaric acid d ($C_4H_6O_6$) + Chlorsuccinic acid l ($C_4H_5O_4Cl$)					
Centnerszwer, 1899				Timmermans and Heuse, 1931					
%	f. t.	%	f. t.	mol%	f. t.	E	mol%	f. t.	E
100	167.1	40.2	198.3	0	174.5	173	60	167	157
90.2	178.3	30.0	191.2	15	171	157	75	172	"
72.8	180.8	19.5	182.0	25	167	157	85	176	"
69.9	188.3	9.8	173.3	35	161	156.5	100	179	"
60.2	197.7	0.0	166.8	50	162.5	157			
50.2	203.8		(1+1)						
Findlay and Campbell, 1928				Machtelinckx, 1951					
%	f. t.	%	f. t.	mol%	f. t.	E	mol%	f. t.	E
0	168.5	7	170	0	174.2	174	50	157.5	152
5	162.5	12.4	195	10	169	-	60	162	152.5
5.7	161 E	50	205	20	164	151.5	80	169	"
				30	159	152.5	100	177.5	177.5
				40	155.5	152			
Taboury and Vauthier, 1945 (fig.)				Tartaric acid d ($C_4H_6O_6$) + Chlormalic acid l I ($C_4H_5O_5Cl$)					
%	f. t.			Mokry, 1933					
0	170			mol%	f. t.	E	mol%	f. t.	E
11	160			0	173.6	158.0	60	163.2	142.7
50	217			25	165.0	143.4	75	165.3	143.7
89	160			40	162.8	142.4	100	174.5	147.0
100	170			50	161.9	142.6			
			(1+1)						
Tartaric acid d ($C_4H_6O_6$) + Chlorsuccinic acid d ($C_4H_5O_4Cl$)				Tartaric acid d ($C_4H_6O_6$) + Chlormalic acid l II ($C_4H_5O_5Cl$)					
Timmermans and Heuse, 1931				Mokry, 1933					
mol%	f. t.	E	mol%	f. t.	E	mol%	f. t.	E	
0	174	173	50	163	156.5	0	173.6	158	54
15	170	156.5	60	167	"	25	165.3	153.2	60
25	166	"	75	173	"	40	159.7	152.5	55
34	162	"	85	176	157	45	158.8	152.2	75
38	159	"	100	179	177.5	50	158.0	151.5	100
42	159.5	"							
Machtelinckx, 1951				Machtelinckx, 1951					
mol%	f. t.	E	mol%	f. t.	E	mol%	f. t.	E	
0	174.2	174	45	157	152.5	0	174.2	174	45
10	170	"	60	163	"	10	170	"	60
20	164.5	152.5	80	170.5	"	20	164.5	152.5	80
30	159	"	100	177.5	-	30	159	"	100
40	155.5	"				40	155.5	"	

Tartaric acid d ($C_4H_6O_6$) + Mandelic acid d
($C_8H_8O_3$)

Timmermans and Motiuk, 1932

mol%	f. t.	E	mol%	f. t.	E
0	174	-	65	145.8	126.6
25	166.2	127.2	75	132.0	126.6
50	159.0	126.4	100	133.1	-
E: 126.6°					

Tartaric acid rac ($C_4H_6O_6$) + Mandelic acid rac
($C_8H_8O_3$)

Lettre', Barnbeck and Staunau, 1936

%	f. t.	E	%	f. t.	E
100	119	118	40	199	119
90	180	119	30	201	"
80	188	"	20	202	"
70	193	"	10	204	"
60	196	"	0	205	204
50	198	"			

Tartaric acid l ($C_4H_6O_6$) + Mandelic acid d
($C_8H_8O_3$)

Timmermans and Motiuk, 1932

mol%	f. t.	E	mol%	f. t.	E
0	173	-	75	131.2	127.0
25	165.6	127.4	100	133.1	-
50	160.4	127.2			
E: 127.2°					

Tartaric acid l ($C_4H_6O_6$) + Chlorsuccinic acid l
($C_4H_5O_4Cl$)

Timmermans and Heuse, 1931

mol%	f. t.	E
0	173.5	172.5
25	166	157
50	162.5	"
75	172	"
100	179	178

Tartaric acid l ($C_4H_6O_6$) + Dichlorsuccinic acid d
($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
0	173.3	-	49.4	154	148
16.5	166	148	65.5	154	147
32.8	160	147	100	170	-
E: 57.5%					

Tartaric acid l ($C_4H_6O_6$) + Dichlorsuccinic acid l
($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
0	173.3	-	68.0	151	139
16.9	165	148	77.0	156	140
31.5	159	144	85.0	160	139
53.1	154	143	100.0	168	-
57.5	152	142			
E: 62.5%					

Tartaric acid 1 ($C_4H_6O_6$) + Chlormalic acid 1 I
($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	173.4	158.0	60	162.3	142.1
25	164.8	144.0	75	164.5	143.0
40	162.1	142.8	100	174.5	147.0
50	161.0	142.7			

Tartaric acid 1 ($C_4H_6O_6$) + Chlormalic acid 1 II
($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	173.4	158.0	60	160.5	142.8
25	168.7	143.8	75	166.9	143.6
50	161.9	143.0	100	171.0	144.0
55	159.0	142.4			

Tartaric acid rac ($C_4H_6O_6$) + Chlormalic acid I
($C_4H_5O_5Cl$) rac

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	210.0	180.0	25	178.0	129.6
25	202.3	136.0	10	167.2	128.2
50	191.8	131.1	0	145.0	-

Tartaric acid rac ($C_4H_6O_6$) + Chlormalic acid rac
II ($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
100	210.0	180.0	22.5	160.5	119.3
75	195.8	141.3	17.5	154.0	118.1
60	185.6	123.4	10	155.1	117.3
50	180.6	120.0	0	158.0	-
30	166.3	118.6			

E: 152.5°

Mesotartaric acid ($C_4H_6O_6$) + Chlorsuccinic acid 1
($C_4H_5O_4Cl$)

Timmermans and Heuse, 1931

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	178.5	177.5	40	153	139
85	176	166	25	144	136
75	171	158	15	148	137
60	164	144	0	151	139-140
50	160	141			

Mesotartaric acid ($C_4H_6O_6$) + Chlormalic acid rac
I ($C_4H_5O_5Cl$)

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	151.3	137.0	57.5	136.7	119.1
25	141.9	122.8	62.5	132.6	119.5
37.5	136.2	122.0	78	135.2	118.2
45	138.8	123.0	75	138.1	117.6
50	139.0	121.4	100	145	-

Dilactic acid ($C_6H_{10}O_5$) (+) + (-)

Fredga, 1947

mol%	f. t.	mol%	f. t.
0.0	91.1	19.9	101.1
3.5	88.5	30.0	107.7
6.9	86.6	40.0	111.2
10.0	87.6	50.0	112.8
14.0	94.5		

Diformyltartaric acid ($C_6H_6O_8$) d + l

Ringer, 1902

%	f. t.	%	f. t.
0	119.2	34.9	100
8.5	113.6	44.9	103.7
15.0	108.4	50	104.4
27.5	96		

Chloracetic acid ($C_2H_3O_2Cl$) + Dichloroacetic acid
($C_2H_2O_2Cl_2$)

Kendall, 1914

%	f. t.	%	f. t.
0	61.4	59.6	10.8
9.9	56.8	67.3	-5.5
17.5	52.5	75.3	-5.8
24.2	47.5	87.8	+2.8
33.6	40.5	100	9.7
46.0	29.6		

Chloracetic acid ($C_2H_3O_2Cl$) + Trichloroacetic acid
($C_2HO_2Cl_3$)

Kendall, 1914

%	f. t.	%	f. t.
0	61.4	58.3	24.3
15.2	53.5	68.1	33.2
25.5	46.5	75.9	39.9
34.5	38.9	84.5	46.1
41.8	31.0	100	57.3
48.6	22.4		

Chloracetic acid ($C_2H_3O_2Cl$) + Benzoic acid
($C_7H_6O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	121.0	32.0	52.6
81.0	107.2	25.1	48.7
69.8	96.8	21.1	50.7
58.5	86.1	14.4	54.5
52.9	80.4	5.9	58.6
44.2	69.9	0	61.4
38.6	62.4		

Chloracetic acid ($C_2H_3O_2Cl$) + Phenylacetic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	76.7	41.6	33.6
89.5	70.1	32.9	40.0
80.9	63.8	23.9	46.7
72.5	56.9	14.9	52.7
64.8	49.9	6.7	57.9
56.6	42.3	0	61.4
49.9	35.2		

Chloracetic acid ($C_2H_3O_2Cl$) + o-Toluic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	103.4	32.4	52.3
89.1	97.0	27.5	47.9
77.0	89.6	22.1	50.7
66.4	82.3	16.5	53.3
57.4	75.5	11.5	55.7
50.5	70.2	5.8	58.5
44.4	64.9	0	61.4
38.2	58.8		

Chloracetic acid ($C_2H_3O_2Cl$) + m-Toluic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	107.6	35.7	53.9
90.1	101.0	28.4	46.7
79.6	93.6	21.2	50.5
68.4	84.7	14.4	54.2
56.9	75.3	7.7	57.7
45.2	64.1	0	61.4

Chloracetic acid ($C_2H_3O_2Cl$) + p-Toluic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	178.6	22.7	95.5
83.1	167.2	17.1	83.1
70.4	155.8	12.9	71.1
56.9	141.8	9.3	56.8
45.4	128.5	4.7	59.1
34.0	114.0	0	61.4

Chloracetic acid ($C_2H_3O_2Cl$) + Cinnamic acid
($C_9H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	136.8	31.4	60.5
89.3	128.2	25.0	48.3
77.5	118.6	19.0	51.2
68.0	109.0	13.9	54.0
54.4	95.9	8.2	57.1
44.7	83.8	0	61.4
36.4	70.2		

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + Trichloroacetic acid ($C_2HCl_3O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	9.7	53.5	+14.5
6.3	7.0		32.9
17.8	1.0	78.8	42.5
31.3	-7.9	87.8	49.6
43.1	-0.6	100	57.3

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + Benzoic acid ($C_7H_6O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	121.0	34.9	55.6
81.5	104.0	29.4	52.8
70.7	91.6	35.3	50.1
61.1	79.1	16.9	42.6
50.8	64.6	11.6	33.6
48.4	61.2	8.3	25.5
45.7	56.7	5.4	15.3
44.3	57.8	1.8	8.6
40.2	57.2	0	9.7
37.4	56.4		
(1+1)	58.2°		

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + Phenylacetic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	76.7	42.9	+9.0
93.3	72.4	36.9	-5.5
81.4	63.4	25.9	-14.6
71.8	53.6	15.3	-3.3
63.9	43.9	7.5	+3.5
59.2	37.6	0	9.7
50.0	22.3		

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + o-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	103.4	37.9	44.9
89.5	97.1	28.2	28.4
78.6	89.5	20.4	13.0
69.1	81.6	14.4	-1.9
60.7	74.1	12.4	-1.0
51.2	63.0	7.1	+3.9
43.0	52.1	0	9.7

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + m-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	107.6	28.2	19.9
87.4	98.5	23.0	6.1
74.6	87.5	17.1	-6.1
66.1	79.4	11.0	-0.2
56.4	68.2	6.1	+4.2
46.4	53.8	0	9.7
35.9	35.8		

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + p-Toluic acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	178.6	26.1	75.2
85.1	168.1	20.4	59.7
71.6	154.9	15.5	42.3
59.5	139.6	10.8	23.1
50.0	125.2	5.2	5.1
40.9	109.0	0	9.7
33.1	91.3		

Dichloroacetic acid ($C_2H_2O_2Cl_2$) + Cinnamic acid ($C_9H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	136.8	29.8	74.2
86.1	124.3	24.6	69.6
74.1	111.0	17.1	61.4
62.8	97.6	12.8	54.0
55.0	86.1	7.8	42.8
51.5	80.0	6.0	35.7
50.0	80.1	4.1	24.7
44.8	79.7	1.6	8.6
37.3	77.8	0	9.7
(1+1)			

Trichloroacetic acid ($C_2H_0_2Cl_3$) + Benzoic acid
 ($C_7H_6O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	121.0	39.2	32.6
80.1	105.6	33.3	28.1
68.3	89.7	31.5	26.6
63.6	79.9	26.7	32.3
60.1	72.8	22.5	36.9
55.5	64.0	21.9	38.0
52.0	54.4	16.7	45.0
47.1	43.1	9.4	50.5
42.9	34.6	0	57.3
(1+1)	36.4°		

Pushin and Rikovski, 1940-46

mol%	f. t.	E	mol%	f. t.	E
0	57	-	45	41	30
10	49	-	47	45.5	29.5
17	42	16	50	52.5	28
20	39	21	55	64.5	29
25	34.5	26	55.5	66.5	-
30	28.5	26	60	73	24
32	28	26.5	65	83	-
35	29.5	25.5	70	90	-
38	30.5	24	80	102.5	-
40	31.3	-	85	108	-
	27.5metast.	-	100	121	-
42	31.5	-			
43.5	37.5	31			

 Trichloroacetic acid ($C_2H_0_2Cl_3$) + Phenylacetic
 acid ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	76.7	41.2	10.2
90.5	70.8	34.9	21.2
81.4	63.3	28.4	31.3
70.8	51.7	20.8	41.2
63.1	40.1	11.7	49.3
55.4	25.9	0	57.3
47.9	9.2		

 Trichloroacetic acid ($C_2H_0_2Cl_3$) + o-Toluic acid
 ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	103.4	37.5	50.4
90.0	97.6	33.1	48.1
81.2	90.5	28.8	45.1
73.9	83.9	23.5	39.4
67.2	76.8	27.9	30.7
58.3	64.7	21.5	38.9
53.8	55.7	15.0	45.5
49.8	52.9	8.7	51.3
45.5	52.6	0	57.3
40.8	51.8		
(1+1)	52.9°		

 Trichloroacetic acid ($C_2H_0_2Cl_3$) + m-Toluic acid
 ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	107.6	41.9	34.6
89.3	100.2	36.7	31.3
78.1	89.8	31.4	26.2
65.7	75.3	26.5	32.4
60.2	66.6	21.0	38.6
55.7	56.9	15.9	44.1
51.4	45.4	7.7	51.5
49.6	37.3	0	57.3
45.8	36.3		
(1+1)	37.4°		

 Trichloroacetic acid ($C_2H_0_2Cl_3$) + p-Toluic acid
 ($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	178.6	34.5	63.5
87.2	170.4	30.5	60.3
76.2	160.1	25.7	55.7
65.5	145.9	22.3	51.8
57.6	131.9	18.1	45.0
50.1	115.5	12.9	46.6
44.8	100.2	6.9	52.2
40.0	84.1	0	57.3
36.9	69.1		
			(1+1)

Trichloroacetic acid ($C_2H_0_2Cl_3$) + Cinnamic acid
($C_9H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
100	136.8	35.3	55.7
87.0	122.2	29.2	49.3
76.1	108.5	25.9	49.3
65.8	94.8	24.8	36.1
56.6	79.9	19.7	42.5
50.3	68.5	17.4	45.0
45.3	62.1	9.3	51.1
41.4	59.7	0	57.3
(1+1)	63°		

α -Bromopropionic acid l ($C_3H_5O_2Br$) +
Dichlorosuccinic acid d ($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	mol%	f. t.
0	0.7	52.7	136.0
9.1	38.0	75.0	154.0
24.2	93.0	100.0	168.0
32.0	108.0		

α -Bromopropionic acid l ($C_3H_5O_2Br$) +
Dichlorosuccinic acid l ($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	mol%	f. t.
0	0.7	46.5	126
17.1	74.0	60.2	145
33.5	108.0	100.0	168

α -Bromotetracosanic acid ($C_{24}H_{47}O_2Br$) +
 α -Bromolignoceric acid ($C_{24}H_{47}O_2Br$)

Meyer, Brod and Soyka, 1913

%	f. t.	%	f. t.
0	73.5	75.1	67.5-68
14.5	71.5-72	80.4	67.0-67.5
23.2	70.5-71	85.9	67.0-67.5
34.4	69.5-70	91.2	67.0-67.3
45.2	69.0-69.5	95.8	67.0-67.5
55.3	68.0-68.5	100	68.5
66.5	67.5-68		

β -Chlorcrotonic acid ($C_4H_5O_2Cl$) n + iso

Skau and Saxton, 1933

mol%	f. t.	mol%	f. t.
100	60.5	75.0	45.7
95.55	57.9	72.5	44.1
92.71	56.3	70.6	42.8
90.77	55.2	65.0	46.8
88.9	54.2	61.1	50.9
84.0	51.3	52.5	59.1
81.0	49.5	0.0	93.6
78.8	48.1		

Chlorosuccinic acid ($C_4H_5O_4Cl$) d + l

Centnerszwer, 1899

%	f. t.	%	f. t.
100	175.8	39.8	154.3
90.2	168.4	29.5	154.6
80.3	159.8	20.2	158.2
69.6	156.4	10.7	176.1
59.8	153.7	0.0	176.1
50.1	153.8		

Mommen, 1927

%	f. t.	E	%	f. t.	E
100	174.5	-	41.3	149.0	129.0
92.8	164.6	130.2	34.3	142.5	128.7
85.7	155.0	128.0	28.0	136.2	129.7
77.5	132.3	128.0	22.5	132.3	128.0
71.0	136.2	129.7	14.3	155.0	128.0
65.7	142.5	128.7	7.2	164.6	130.2
58.7	149.0	129.0	0	174.5	-
50.1	153.3	-			

Centnerszwer, 1899

%	f. t.	%	f. t.
50.0	156.0	20.0	162.5
40.0	149.2	9.6	169.1
30.0	158.2	0.0	176.1

Chlorsuccinic acid l ($C_4H_5O_4Cl$) +
Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
0	177.0	-	59.9	146.0	139.0
35.4	157.1	140	80.9	158.1	140.0
45.0	146.2	139.1	100.0	168.0	-
52.4	143.0	139.0			

E: 50%

Chlorsuccinic acid l ($C_4H_5O_4Cl$) +
Dichlorsuccinic acid l ($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
0	177.0	-	57.0	141.2	136.1
25.2	159.5	137.0	76.5	152.0	135.0
40.1	146.0	135.0	100	166.0	-

E: 50%

Chlorsuccinic acid d ($C_4H_5O_4Cl$) +
Chlormalic acid(II) l ($C_4H_5O_5Cl$)

Machtelinckx, 1951

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	170.5	170	40	155	132
80	148	130	30	162	134
70	141	132	20	166	140
60	146	130	0	177.7	177.5
50	150	130			

Chlorsuccinic acid l ($C_4H_5O_4Cl$) +
Chlormalic acid (II) l ($C_4H_5O_5Cl$)

Machtelinckx, 1951

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100	170.5	170	40	158	136
80	148	131.5	30	165	140
70	142	131.5	20	170	144
60	146	134	0	177.7	177.5
50	152	134			

Chlorsuccinic acid l ($C_4H_5O_4Cl$) +
Chlormalic acid (I) d ($C_4H_5O_5Cl$)

Machtelinckx, 1951

mol%	f. t.	E	mol%	f. t.	E
100	174.5	174	40	149	140
80	161	140	30	150	141
70	153	136	20	162	138
60	147	139	0	177.7	177.5
50	150	140			

Chlorsuccinic acid l ($C_4H_5O_4Cl$) +
Chlormalic acid (I) l ($C_4H_5O_5Cl$)

Machtelinckx, 1951

mol%	f. t.	E	mol%	f. t.	E
100	174.5	174	40	152	132
80	162	138	30	151	134
70	154	136	20	163	136
60	146	133	0	177.7	177.5
50	150	132			

Chlorsuccinic acid rac ($C_4H_5O_4Cl$) +
Bromsuccinic acid rac ($C_4H_5O_4Br$)

Mommen, 1927

%	f. t.	m. t.	%	f. t.	m. t.
100	160.2	-	45.0	145.0	139
83.4	158.8	154.0	35.1	148.2	140
69.2	152.1	145.0	25.5	152.6	142
60.0	142.0	139	10.0	152.1	147
57.0	139.0	-	0.0	153.3	-
52.0	141.5	139.0			

Chlorsuccinic acid d ($C_4H_5O_4Cl$) +
Bromsuccinic acid d ($C_4H_5O_4Br$)

Mommen, 1927

%	f. t.	E	%	f. t.	E
100	173.3	-	37.7	173.8	173.5
76.6	173.5	173.3	15.5	174.0	173.7
50.3	173.6	173.3	0.0	174.5	-

Chlorsuccinic acid d ($C_4H_5O_4Cl$) +
Bromsuccinic acid 1 ($C_4H_5O_4Br$)

Centnerszwer, 1899

%	f. t.	%	f. t.
100	175.7	40.6	157.1
90.5	168.9	30.2	161.6
79.1	163.7	20.7	164.5
70.0	160.8	10.7	171.5
59.9	157.2	0.0	176.5
50.0	157.3		

Mommen, 1927

%	f. t.	E	%	f. t.	E
100	173.2	-	33.7	162.8	-
83.5	172.2	148	32.0	163.5	150
70.0	166.2	149	27.9	170.1	155
60.0	156.2	147.5	17.5	172.0	159
56.5	155.2	-	4.5	173.1	163.7
49.8	155.4	148	0	174.5	-
42.0	157.6	149			

(1+1)

Chlorsuccinic acid i ($C_4H_5O_4Cl$) +
Bromsuccinic acid 1 ($C_4H_5O_4Br$)

Centnerszwer, 1899

%	f. t.	%	f. t.
0.0	175.7	60.2	159.5
10.3	172.6	70.7	155.7
19.1	169.3	80.0	154.1
30.5	165.9	90.3	153.9
40.0	165.8	100.0	156.0
50.5	163.1		

Dichlorsuccinic acid d + 1 ($C_4H_4O_4Cl_2$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
0	168.0	-	50	175	156.3
20.8	160.2	155	100	166	-
29.5	163.8	155.2			

(1+1)

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Chlormalic acid (II) 1 ($C_4H_5O_5Cl$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	171	-	38.6	156	148
78.8	163	147	25.0	162	148
63.2	155.5	148	0	170	-

E: 50 mol%

Dichlorsuccinic acid 1 ($C_4H_4O_4Cl_2$) +
Chlormalic acid (II) 1 ($C_4H_5O_5Cl$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	171	-	32.5	155	146
81.5	162	145.5	24.8	161	145
66.6	155	146	0.0	168	-
44.9	150	144			

E: 50 mol%

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Chlormalic acid (I) d ($C_4H_5O_5Cl$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	179	-	37.1	148	141
80.2	165	143	21.3	157	141
68.0	156	143	0.0	168	-
51.6	149	141			

E: 56 mol%

Dichlorsuccinic acid 1 ($C_4H_4O_4Cl_2$) +
Chlormalic acid (I) d ($C_4H_5O_5Cl$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	179	-	44.6	146	138
69.75	160	140	35.5	150	137
60.65	152	138	0.0	166	-
52.2	147	138			

E: 50 mol%

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Alanine d ($C_3H_7O_2N$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	297	-	52.5	167	84
83.6	208	-	43.6	161	78
69.9	178	95	0.0	170	-

E: 25% 80°

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Alanine l ($C_3H_7O_2N$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	297	-	35.0	130	78
80.1	182	104	19.6	140	81
56.6	167	90	0.0	170	-
44.5	153	82			

E: 25% 80°

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Aspartic acid l ($C_4H_7O_4N$)

Van Lancker, 1938

mol%	f. t.	E
100	271	-
65.5	169	141
50.4	156	139
26.9	162	140
0.0	170	-

E: 63%

Dichlorsuccinic acid l ($C_4H_4O_4Cl_2$) +
Aspartic acid l ($C_4H_7O_4N$)

Van Lancker, 1938

mol%	f. t.	E
100	272	-
66.0	162	138
42.5	156	138
17.6	164	136
0.0	168	-

E: 63%

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Asparagine l ($C_4H_8O_3N_2$)

Feinberg, 1939

mol%	f. t.	mol%	f. t.
100	189	49.8	128
89.4	165	36.1	138
79.4	124	28.3	142
65.7	131	24.0	147
63.4	132	3.7	168

Dichlorsuccinic acid l ($C_4H_4O_4Cl_2$) +
Asparagine l ($C_4H_8O_3N_2$)

Feinberg, 1939

mol%	f. t.	mol%	f. t.
77.9	158	32.0	133
59.5	156	23.6	140
44.0	120	0.0	168

Dichlorsuccinic acid d ($C_4H_4O_4Cl_2$) +
Mandelic acid d ($C_8H_8O_3$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	133	-	52.4	126	107
75.6	117	108	37.4	144	107
62.0	114	107	0.0	168	-

E: 33 mol%

Dichlorsuccinic acid l ($C_4H_4O_4Cl_2$) +
Mandelic acid d ($C_8H_8O_3$)

Van Lancker, 1938

mol%	f. t.	E	mol%	f. t.	E
100	133	-	44.7	132	103
80.0	119	100	24.8	151.5	106
61.9	111	102.5	0	166	-
59.4	114	102			

E: 33 mol%

Bromsuccinic acid d + l ($C_4H_5O_4Br$)

Mommen, 1927

%	f. t.	E	%	f. t.	E
100	173.2	-	40.1	157.5	155.0
86.8	169.6	157.0	31.2	155.5	155.0
79.5	165.2	155.5	20.5	165.2	155.5
68.8	155.5	155.0	13.2	169.6	157.0
59.9	157.5	155.0	0	173.2	-
50.0	160.2	-			

 α, α' -Dibrompimelic acid ($C_7H_{10}O_4Br_2$) (+) + (-)

Schotte, 1956 (fig.)

%	f. t.	%	f. t.
0	60	30	76
10	56	40	90
18	50 E	50	97
20	58		

 α, α' -Dibrompimelic acid ($C_7H_{10}O_4Br_2$) rac + meso

Schotte, 1956 (fig.)

%	f. t.	%	f. t.
0	98	50	131
10	79	60	135
14	72 E	70	140
20	99	80	143
30	117	90	148
40	125	100	152

 $\gamma, \gamma', \gamma''$ -Trichlor- β -oxybutyric acid (+) + (-)
($C_4H_5O_3Cl_3$)

Ross, 1936

%	f. t.	%	f. t.
0.0	99.9	50.0	118.3
4.6	97.9	53.9	116.1
8.9	96.6	54.4	116.8
9.1	96.6	67.2	109.3
12.3	96.8	72.8	107.2
14.2	98.8	80.2	99.2
16.7	99.4	83.3	99.6
25.6	103.5	91.0	97.2
25.6	108.9	95.3	98.5
38.8	112.2	100.0	100.1
42.2	115.1		

(1+1)

Chlormalic acid (I) ($C_4H_5O_5Cl$) d + l

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0.0	174.5	147.0	42.5	158.2	120.4
25.0	166.0	121.3	47.5	151.0	120.6
33.4	161.5	119.6	50.0	145.0	-

Chlormalic acid (I) d ($C_4H_5O_5Cl$) + (II) l

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	174.5	147.0	60	152.2	139.2
25	165.8	140.5	75	161.8	140.9
40	158.8	139.4	100	170.5	144.0
50	154.9	139.5			

Chlormalic acid (I) l ($C_4H_5O_5Cl$) + (II) l

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
0	174.5	147.0	75	161.5	140.0
25	164.5	139.8	100	170.5	144.0
50	154.5	140.3			

Chlormalic acid (II) ($C_4H_5O_5Cl$) d + l

Mokry, 1933

mol%	f. t.	E	mol%	f. t.	E
100	171.0	144.0	65	155.7	134.3
90	164.2	135.3	52.5	157.7	133.0
75	153.3	133.4	50	158.0	-

Methylsulfide-succinic acid ($C_5H_8O_4S$) (+) + (-)

Matell, 1952

mol%	f. t.	mol%	f. t.
50.0	137.5	79.7	135.5
54.8	137	88.8	139
59.8	136.5	94.8	141
69.9	134	100.0	143

(1+1)

Ethylsulfide-succinic acid ($C_6H_{10}O_4S$) (+) + (-)

Matell, 1952

mol%	f. t.		
	I	II	III
50.0	125.5	119.5	112.5
55.4	121	118.5	112.5
59.9	119.5	116.5	112
65.0	117.5	112	111.5
70.0	115	111	-
75.0	114.5	-	-
80.2	117.5	-	-
85.4	120	-	-
90.2	122.5	-	-
94.8	125	-	-
100.0	127	-	-

(1+1)

S-Propylsulfide-succinic acid ($C_7H_{12}O_4S$) (+) + (-)

Matell, 1951 (fig.)

%	f. t.	%	f. t.
100	120	30	114
80	110	21	109
60	117	0	119
50	119		

(1+1)

S-Methylsulfideethylsuccinic acid (-) ($C_7H_{12}O_4S$) +S-Propylsulfidesuccinic acid (+) ($C_7H_{12}O_4S$)

Matell, 1951 (fig.)

%	f. t.	%	f. t.
100	86	50	102
90	84	35	101
80	96	20	112
70	100	0	120

S-Methylsulfideethylsuccinic acid ($C_7H_{12}O_4S$) (+) + (-)

Matell, 1951 (fig.)

%	f. t.	%	f. t.
0	86	60	92
12	81	80	96
30	91	87	82
50	93	100	86

Butylsulfidesuccinic acid ($C_8H_{14}O_4S$) (+) + (-)

Matell, 1952

mol%	f. t.	mol%	f. t.
50.0	105	24.8	106.5
44.7	104	19.9	110
39.5	103	9.0	115.5
34.8	102	0.0	120.5
29.7	103		

Pentylsulfidesuccinic acid ($C_9H_{16}O_4S$) (+) + (-)

Matell, 1952

mol%	f. t.	mol%	f. t.
50.0	107	24.7	111.5
44.9	106.5	19.6	115
39.6	106	9.4	120
34.7	105	0.0	125
30.2	108		

Disulfidadipic acid ($C_6H_{10}O_4S_2$) (+) + (-)

Fredga, 1941

mol%	f. t.	mol%	f. t.
100	118.0	79.8	113.2
94.3	116.3	70.0	112.0
90.0	114.9	59.8	111.6
84.8	113.6	50.0	111.1

Disulfide adipic acid (-) ($C_6H_{10}O_4S_2$)
+ Dithiodilactic acid (+) ($C_6H_{10}O_5S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
100.0	117.5	48.2	92.8
90.3	112.8	44.6	102.0
80.2	107.5	41.2	104.0
71.4	104.2	36.4	105.9
66.7	102.1	30.9	108.2
63.6	100.9	20.1	110.4
59.8	99.0	10.8	113.2
54.8	97.0	0.0	118.0
49.9	97.1		

Disulfideadipic acid (-) ($C_6H_{10}O_4S_2$) +
Dithiodilactic acid (-) ($C_6H_{10}O_5S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
100.0	117.5	50.0	100.1
90.1	110.9	45.5	100.8
80.2	106.0	42.1	102.0
70.8	101.5	37.4	103.9
65.3	98.8	31.1	106.7
60.6	98.8	19.8	110.8
57.9	99.5	9.5	113.8
54.6	99.7	0.0	118.0

(1+1)

Xantogensuccinic acid ($C_7H_{10}O_5S_2$) (+) + (-)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	132.5	19.6	139
2.8	132	28.9	143.5
5.2	130.5	40.0	147.5
10.3	132.5	50.0	149

Ethyl(carbothiolon)lactic acid (+) ($C_6H_{10}O_3S_2$) +
Ethyl(carbothiolon)oxybutyric acid (+) ($C_7H_{12}O_3S_2$)

Fredga, Tenow and Bilstrom, 1943

%	f. t.	%	f. t.
100	31.5	47.3	27.0
90.8	27.0	32.2	43.0
80.0	22.0	24.2	49.4
70.1	18.0	12.9	57.2
52.6	18.8	0.0	63.0

Ethyl(carbothiolon)lactic acid (-) ($C_6H_{10}O_3S_2$) +
Ethyl(carbothiolon)oxybutyric acid (+) ($C_7H_{12}O_3S_2$)

Fredga, Tenow and Billstrom, 1943

%	f. t.	%	f. t.
100	31.5	50.0	50.8
96.1	27.0	39.7	49.5
93.0	24.5	29.5	47.0
90.0	25.5	25.0	48.0
85.3	35.0	20.6	51.0
71.6	46.2	12.6	56.1
67.0	47.2	0.0	63.0
53.9	50.1		

(1+1)

Ethyl(carbothiolon)lactic acid ($C_6H_{10}O_3S_2$) rac +
Ethyl(carbothiolon)oxybutyric acid ($C_7H_{12}O_3S_2$)
rac

Fredga, Tenow and Billstrom, 1943

mol%	f. t.	mol%	f. t.
100	57.7	40.2	53.2
84.6	51.3	25.8	59.6
70.6	45.6	11.1	65.6
64.2	43.8	0.0	71.0
54.6	46.8		

ETHYL(CARBOTHIOLON) LACTIC ACID rac.
+ ETHYL(CARBOTHIOLON) LACTIC ACID. ETHYL(CARBOTHIOLON) OXYBUTYRIC ACID

Ethyl(carbothiolon)lactic acid ($C_6H_{10}O_3S_2$) rac +
 Ethyl(carbothiolon)lactic acid.Ethyl(carbothiolon)
 oxybutyric acid ($C_{13}H_{22}O_6S_4$)

Fredga, Tenow and Billström, 1943

mol%	f. t.	mol%	f. t.
100	71.0	31.5	54.0
84.6	67.5	20.0	51.4
71.2	65.0	10.1	50.5
56.0	60.7	0.0	50.8
42.2	57.1		

Ethyl(carbothiolon)oxybutyric acid (+) + (-)
 ($C_7H_{12}O_3S_2$)

Fredga, Tenow and Billström, 1943

mol%	f. t.	mol%	f. t.
50.0	57.7	3.6	30.5
35.7	55.5	2.7	29.0
24.7	52.0	1.7	30.0
15.1	45.0	0.0	31.5
9.4	40.0		

Ethyl(carbothiolon)oxybutyric acid ($C_7H_{12}O_3S_2$) rac +
 Ethyl(carbothiolon)lactic acid.Ethyl(carbothiolon)
 oxybutyric acid ($C_{13}H_{22}O_6S_4$)

Fredga, Tenow and Billström, 1943

mol%	f. t.	mol%	f. t.
100	57.7	43.0	45.1
84.9	54.8	28.1	46.0
69.0	51.2	13.8	48.2
56.1	48.7	0.0	50.8

(1+1)

Xantogensuccinic acid (+) ($C_7H_{10}O_5S_2$) +
 Ethyl(carbothiolon)malic acid (+) ($C_7H_{10}O_5S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	132.5	50.0	131.5
6.3	129.5	55.3	130.5
11.3	127	60.0	130.5
15.3	125	65.0	132.5
21.5	123	69.9	135
25.1	125.5	80.7	140
30.3	127	89.9	145
40.2	130	100.0	150

(1+1)

Ethyl(carbothiolon)malic acid ($C_7H_{10}O_5S_2$)
 (+) + (-)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	150	16.2	153.5
1.3	149	30.4	160
3.0	148.5	40.1	162.5
5.1	147	50.0	163.5
8.5	147		

Ethyl(carbothiolon)malic acid rac ($C_7H_{10}O_5S_2$) +
 Xantogensuccinic acid.Ethyl(carbothiolon)malic acid
 ($C_{14}H_{20}O_{10}S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	131.5	25.0	141
5.5	131	31.1	145
10.0	131.5	39.7	148.5
14.2	132.5	60.1	155.5
16.7	135	80.4	160
19.2	136.5	100.0	163.5

Xantogensuccinic acid (-) ($C_7H_{10}O_5S_2$) +
 Ethyl(carbothiolon)malic acid (+) ($C_7H_{10}O_5S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	132.5	50.0	126.5
11.6	127	60.1	133.5
22.1	122	74.0	140
31.2	117.5	87.0	145
38.4	117	100.0	150
41.0	119.5		

Xantogensuccinic acid rac ($C_7H_{10}O_5S_2$) +
 Ethyl(carbothiolon)malic acid rac ($C_7H_{10}O_5S_2$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	149	52.0	142
10.8	144	68.3	150
23.7	138.5	84.1	156.5
33.1	134.5	100.0	163.5
40.2	136		

XANT(**XANTOGENSUCCINIC ACID rac.**
+ XANTOGENSUCCINIC ACID.ETHYL CARBOTHIONMALIC ACID

1243

Xantogensuccinic acid ($C_7H_{10}O_5S_2$) rac. +
Xantogensuccinic acid.Ethylcarbothiolonmalic acid
($C_{14}H_{20}O_{10}S_4$)

Fredga, 1941

mol%	f. t.	mol%	f. t.
0.0	131.5	40.5	131.5
10.4	129.5	51.1	135
20.3	127	62.0	138.5
25.3	126	81.1	143
28.0	126.5	100.0	149
31.8	128		

(1+1)

Methylhydrogencamphorate ($C_{11}H_{18}O_4$) d + 1

Ross and Sonerville, 1926

%	f. t.	%	f. t.
0.0	74.3	61.6	79.1
4.4	70.8	69.3	70.4
10.3	66.5	74.2	66.5
12.0	65.9	83.0	65.0
12.6	66.2	86.6	64.7
17.8	66.9	88.0	64.6
30.5	70.3	90.6	65.0
46.1	83.6	95.2	67.1
50.1	84.6	100	73.5
54.3	83.4		

(1+1)

Ross and Sonerville, 1926

%	f. t.	%	f. t.
0	74.4	29.35	74.8
4.85	70.5	37.00	82.2
7.45	68.7	45.05	85.5
13.45	65.6	50.00	85.9
19.90	67.6		

Cholanic acid ($C_{24}H_{40}O_2$) + Allocholanic acid
($C_{24}H_{40}O_2$)

Wieland, Dane and Martins

%	f. t.	%	f. t.
0	165	60	162
10	161.5	70	159
20	157.5	80	156
30	160	90	162.5
40	162	100	170
50	163.5		

(1+1)

Carphoric acid ($C_{10}H_{16}O_4$) d + 1

Centnerszwer, 1906 (fig.)

%	f. t.	%	f. t.
0	186.5	30	195
10	184	40	197
20	190	50	200

Ross and Somerville, 1926

%	f. t.	%	f. t.
100.0	187.6	47.9	199.6
95.4	185.9	40.7	196.9
93.5	185.4	34.4	193.4
92.7	185.0	28.1	193.3
87.3	186.5	13.4	187.3
74.4	191.3	8.9	186.7
56.9	197.2	5.5	186.8
49.8	199.5	0.0	187.5

(1+1)

Ross and Somerville, 1926

%	f. t.	%	f. t.
0	188.2	25.4	193.1
3.25	187.3	31.8	197.1
7.30	186.4	38.2	198.1
9.15	187.2	42.0	200.5
15.30	189.3	50.0	202.6

Isocamphoric acid ($C_{10}H_{16}O_4$) d + 1

Centnerszwer, 1906

%	f. t.	%	f. t.
0.0	171.8	60.7	188.1
10.6	168.0	70.0	184.2
19.9	177.8	79.5	178.1
30.0	184.5	90.0	166.3
41.0	188.5	100.0	171.7
50.7	189.8		

(1+1)

Benzoic acid ($C_7H_6O_2$) + Phenylacetic acid
($C_8H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	121.0	61.7	57.4
9.0	115.2	71.1	56.9
17.9	108.5	81.1	63.7
30.0	97.8	89.9	69.5
42.1	85.3	100	76.7
51.3	74.0		

Benzoic acid ($C_7H_6O_2$) + o-Phthalic acid
($C_8H_6O_4$)

Ward and Cooper, 1930

%	f. t.	%	f. t.
0.000	122.7	10.000	120.1
5.698	118.8	14.37	130.3
10.000	117.2	20.00	138.2
14.37	112.3	33.33	151.6
-	-	50.00	166.5
-	-	66.67	175.1
		100.00	193.3

E: 8.7% 117.3°

Benzoic acid ($C_7H_6O_2$) + Cinnamic acid ($C_9H_8O_2$)

Kendall, 1914

mol%	f. t.	mol%	f. t.
0	121.0	57.7	100.5
13.2	111.0	66.9	109.5
23.1	102.0	80.1	121.5
30.1	95.4	90.4	130.1
38.3	87.2	100	136.8
47.5	87.3		

A and L Kofler, 1948

E: 48.5% 83°

Sorum and Durand, 1952

%	f. t.
0	121.4
E	81.0
100	136.8

Benzoic acid ($C_7H_6O_2$) + Salicylic acid ($C_7H_6O_3$)

Jaeger, 1907

%	f. t.	%	f. t.
0	121.4	54.3	126
17.2	119	73	145
30	115	100	156

Hrynakowski, 1934

E: 42.9% 110°

Benzoic acid ($C_7H_6O_2$) + p-Fluorbenzoic acid
($C_7H_5O_2F$)

Koopal, 1911

mol%	f. t.	mol%	f. t.
0	123.7	64.5	159.6
8.4	124.2	67.0	160.7
16.6	130.2	69.4	162.0
17.6	138.2	70.0	163.0
39.3	146.0	71.8	164.0
49.3	152.0	85.0	173.7
59.9	157.7	100	182.6
62.8	158.6		

Benzoic acid ($C_7H_6O_2$) + o-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Bornwater and Holleman, 1912

%	f. t.	E	%	f. t.	E
0	121.7	-	50.14	101.0	91.1
3.6	119.8	-	54.84	106.1	-
12.1	114.7	-	62.77	112.9	-
17.35	111.2	-	70	119.1	-
24.47	105.6	-	79.31	126.5	-
32.45	98.8	91.1	88.11	132.6	-
37.5	-	91.2	95.73	137.9	-
43.87	-	91.0	100	140.7	-

Benzoic acid ($C_7H_6O_2$) + m-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Bornwater and Holleman, 1912

%	f. t.	E	%	f. t.
0	121.7	-	61.03	124.6
8.22	116.9	-	72.9	133.9
17.15	111.1	-	80.87	140.5
28.73	102.5	95.4	92.14	149.0
42.24	103.3	"	100	155.0
50.56	113.5	95.3		

Benzoic acid ($C_7H_6O_2$) + p-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Bornwater and Holleman, 1912

%	f. t.	E	%	f. t.
0	121.7	-	29.12	155.5
6.51	118.0	115.0	40.73	176.6
9.97	"	"	56.21	197.6
19.98	136.9	115.1	100	239.0

Benzoic acid ($C_7H_6O_2$) + o-Iodobenzoic acid
($C_7H_5O_2I$)

Lettre and Lehmann, 1938

%	f. t.	E	%	f. t.	E
100	162	-	40	100	97
90	151	97	30	107	"
80	141	"	20	113	"
70	130	"	10	118	"
60	118	"	0	121.5	-
50	101	"			

Benzoic acid ($C_7H_6O_2$) + m-Iodobenzoic acid
($C_7H_5O_2I$)

Lettre and Lehmann, 1938

%	f. t.	E	%	f. t.	E
100	187	-	50	121	102
90	175	102	40	105	"
80	161	"	30	106	"
70	146	"	20	111	"
60	131	"	10	116	"
			0	121.5	-

Benzoic acid ($C_7H_6O_2$) + p-Iodobenzoic acid
($C_7H_5O_2I$)

Lettre and Lehmann, 1938

%	f. t.	E	%	f. t.	E
100	267	-	40	191	117
90	257	117	30	171	"
80	246	"	20	143	"
70	239	"	10	117	"
60	220	"	0	121.3	-
50	207	"			

Benzoic acid ($C_7H_6O_2$) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Bakunin and Angrisani, 1915

mol%	f. t.	E	min.
0	120	-	-
10	111.5	109	270
20	118	"	250
30	127	"	160
40	135.5	110	60
50	139	-	-
60	134.5	120	50 (1+1)
70	128.5	"	170
80	120	"	350
90	131.5	"	150
100	141.5	-	-

Benzoic acid ($C_7H_6O_2$) + Furoic acid ($C_5H_4O_3$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	133	132	43.0	95.2	85.0
89.6	127.2	85.6	33.1	96.0	85.0
78.3	124.0	85.1	22.5	105.5	85.1
71.1	121.5	85.0	13.5	110.8	85.1
58.0	114.5	85.3	0	122	121
51.4	109.2	85.5			

E: 40% 85°

Benzoic acid ($C_7H_6O_2$) + 2-Thiophenecarboxylic acid ($C_5H_4O_2S$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	128	127	44.5	104.8	95.4
91.6	123.8	94.6	29.0	109.2	94.4
82.9	120.4	94.8	23.3	111.6	94.8
79.3	118.6	94.8	16.5	116.2	95.6
69.2	115.2	95.4	14.0	117.0	95.6
61.7	112.0	94.8	9.7	120.6	97.6
58.5	110.2	95.8	0	122	121
55.5	109.2	95.2			

E: 37% 95°

Benzoic acid ($C_7H_6O_2$) + 3-Thiophenecarboxylic acid ($C_5H_4O_2S$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	138	137	38.5	108.0	100.6
91.5	132.6	102.9	33.8	108.8	103.0
84.1	131.2	103.2	29.8	108.0	103.2
75.0	122.6	103.5	23.9	115.4	105.0
62.2	107.8	103.3	20.6	117.2	104.1
58.6	105.4	102.6	20.0	116.0	103.6
57.2	106.0	104.0	12.5	118.2	104.4
52.3	104.2	101.0	10.0	119.0	104.2
48.0	107.2	103.6	5.0	120.0	110.6
42.2	107.0	101.0	0.0	122.0	121

E: 60% 103°

Benzoic acid ($C_7H_6O_2$) + 2-Pyrrolcarboxylic acid ($C_5H_5O_2N$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	190	190	38.9	165.0	115.0
89.7	180.4	116.8	29.3	158.2	116.8
79.4	178.4	115.6	18.6	153.2	115.4
71.3	176.2	113.2	9.0	127.6	115.6
61.7	172.8	115.6	0	122	121
51.9	171.2	116.4			

E: 7% 115°

Benzoic acid ($C_7H_6O_2$) + Pyrazinecarboxylic acid ($C_5H_4O_2N_2$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	226	224	43.4	186.2	113.6
90.9	205.0	111.8	37.4	184.0	114.4
81.2	204.2	114.0	25.0	173.4	114.6
74.2	203.2	115.0	12.8	159.4	114.4
64.2	198.4	113.0	4.2	127.8	114.0
58.2	194.2	114.6	0	122	121

E: 2% 114°

Benzoic acid ($C_7H_6O_2$) + 2-Pyridinecarboxylic acid ($C_6H_5O_2N$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	137	136	41.2	102.4	87.4
88.4	134.2	88.4	32.8	107.4	87.0
81.4	131.0	87.6	24.5	111.4	87.6
69.7	123.8	86.4	13.4	116.2	87.6
61.7	116.0	87.0	0	122	21
53.5	107.4	87.2			

E: 47% 115°

Benzoic acid ($C_7H_6O_2$) + 3-Pyridinecarboxylic acid ($C_6H_5O_2N$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	233	233	33.4	169.8	114.6
91.0	227.6	115.0	20.2	142.2	114.0
80.0	217.6	115.4	11.0	117.8	113.6
71.4	211.2	115.4	3.2	120.4	114.0
54.6	195.8	114.2	0	122	121
40.5	184.0	115.0			

E: 10% 115°

Benzoic acid ($C_7H_6O_2$) + 4-Pyridinecarboxylic acid
($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	314	312	31.6	255.4	115.0
91.9	304	118.6	18.2	225.2	114.8
63.2	282.8	115.4	10.6	199.4	115.4
46.1	265.4	115.0	3.9	158.8	115.4
38.2	264.2	115.0	0	122	121

E: 10% 115°

Benzoic acid ($C_7H_6O_2$) + 5-Thiazolcarboxylic acid
($C_4H_3O_2NS$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	220	218	31.0	172.4	110.6
92.4	203.5	111.4	21.5	152.0	111.0
78.0	199.4	109.6	6.7	120.0	111.6
67.3	195.4	111.0	0	122	121
50.0	185.0	111.2			

E: 5% 111°

Methylbenzoic acid ($C_8H_8O_2$) o + m

Lettre', Barnbeck and al., 1937

%	f. t.	E	%	f. t.	E
0	104	-	60	91	66
10	100		70	102	"
20	96	66	80	107	"
30	91	"	90	110	"
40	83	"	100	111	-
50	69	"			

Methylbenzoic acid ($C_8H_8O_2$) o + p

Lettre', Barnbeck and al., 1937

%	f. t.	E	%	f. t.	E
0	104	-	50	142	85
10	100	85	60	152	"
15	94	"	70	161	"
20	92	"	80	169	"
30	110	"	90	175	"
40	129	"	100	178	-

o-Methylbenzoic acid ($C_8H_8O_2$) + Salicylic acid
($C_7H_6O_3$)

Lettre', Barnbeck and Lege, 1936

%	f. t.	E	%	f. t.	E
0	105	104	60	135	91
10	101	92	70	143	92
20	95	92	80	149	94
30	97	91	90	154	94
40	112	92	100	157	157
50	124	92			

o-Methylbenzoic acid ($C_8H_8O_2$)
+ m-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f. t.	E	mol%	f. t.	E
100	139	-	40	131	98
90	135	121	30	128	"
80	127	"	20	122	"
70	127	"	10	105	"
60	131	"	0	104	-
50	133	"			

(1+1)

o-Methylbenzoic acid ($C_8H_8O_2$) +
o-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Lettre', Barnbeck and Lege, 1936

%	f. t.	m. t.
100	139	139
89	137	129
80.5	134	124
69.2	130	116
65	128	114

o-Methylbenzoic acid ($C_8H_8O_2$)
+ 3-Methyl-2-thiophenecarboxylic acid ($C_6H_4O_2S$)

Mislow, 1948

%	f. t.	m. t.	%	f. t.	m. t.
100	147	146	46.5	119.6	88.2
91.0	142.0	133.2	34.8	105.6	88.4
81.2	135.6	121.0	18.4	99.0	87.6
72.9	133.4	113.6	8.5	102.2	88.4
64.9	127.8	105.6	0	105	104
51.9	124.8	89.2			

E: 25% 88°

Methylbenzoic acid ($C_8H_8O_2$) m + p

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
0	111	-	50	143	89
10	104	89	60	151	"
15	96	"	70	161	"
20	98	"	80	168	"
30	115	"	90	175	"
40	130	"	100	178	-

m-Methylbenzoic acid ($C_8H_8O_2$) + m-Oxybenzoic acid ($C_7H_6O_3$)

Lettre', Barnbeck and Lege, 1936

%	f.t.	E	%	f.t.	E
0	111	110	50	172	103
10	108	103	60	179	"
20	139	"	70	185	"
26	144	"	80	191	104
30	150	"	90	196	"
40	162	"	100	201	200

m-Methylbenzoic acid ($C_8H_8O_2$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f.t.	E	mol%	f.t.	E
100	147	-	40	102	95
90	141	106	30	99	"
30	134	"	20	97	"
70	128	"	10	103	"
60	121	"	0	111	"
50	113	-			

(1+1)

m-Methylbenzoic acid ($C_8H_8O_2$) + m-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Lettre', Barnbeck and Lege, 1936

%	f.t.	m.t.	%	f.t.	m.t.
100	153	152	40	115	110
90	148	134	30	112	109
79.4	144	122	20	111	"
69	138	114	10	"	"
59.5	131	112	0	"	110
50	124	110			

m-Methylbenzoic acid ($C_8H_8O_2$) + p-Brombenzoic acid ($C_7H_5O_2Br$)

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
0	111	-	59.8	212	105
10	106	105	70	224	"
20	141	"	80	235	"
30	166	"	90	246	"
40	184	"	100	251	-
50	196	"			

p-Methylbenzoic acid ($C_8H_8O_2$) + p-Oxybenzoic acid ($C_7H_6O_3$)

Lettre', Barnbeck and Lege, 1936

%	f.t.	E	%	f.t.	E
0	179	177	60	192	155
10	176	155	70	199	"
20	171	"	80	204	"
30	160	"	90	209	"
40	169	156	100	214	214
50	183	155			

p-Methylbenzoic acid ($C_8H_8O_2$) + p-Chlorbenzoic acid ($C_7H_5O_2Cl$)

Lettre', Barnbeck and Lege, 1936

%	f.t.	m.t.	%	f.t.	m.t.
100	241	239	40	202	185
88.7	238	223	30.2	193	182
80	233	212	20	187	180
69	225	202	9.8	183	178
60	220	194	0	179	177
50	212	190			

p-Methylbenzoic acid ($C_8H_8O_2$) + o-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f.t.	E	mol%	f.t.	E
100	147	-	40	151	133
90	142	128	30	161	"
80	136	"	20	170	"
70	128	"	10	177	"
60	132	"	0	184	-
50	137	-			

(1+1)

p-Methylbenzoic acid ($C_8H_8O_2$) + m-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre, 1940

mol%	f.t.	E	mol%	f.t.	E
100	139	-	40	153	150
90	132	128	30	152	"
80	141	"	20	164	"
70	149	"	10	174	"
60	153	"	0	183	-
50	155	-			

(1+1)

p-Methylbenzoic acid ($C_8H_8O_2$) +
+ p-Nitrobenzoic acid ($C_7H_5O_4N$)

Johnston and Jones, 1928

%	f.t.	m.t.	%	f.t.	m.t.
0	179.6	-	33.2	221.8	184.5
5.1	183.7	180.4	36.2	223.7	211.4
7.7	188.0	181.3	43.3	229.4	211.6
9.1	-	183.0	45.8	229.7	212.7
12.7	197.7	-	56.3	234.0	211.2
15.1	201.6	186.0	62.9	236.4	232.6
17.5	204.9	"	81.5	239.3	238.9
24.4	213.4	"	100	239.3	-

p-Methylbenzoic acid ($C_8H_8O_2$)
+ 5-Methyl-2-thiophenecarboxylic acid ($C_8H_8O_2S$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	139	138	40.0	151.8	116.4
90.6	133.2	116.6	29.7	159.0	116.2
80.8	130.4	117.0	20.5	165.4	116.8
72.1	127.4	116.2	10.0	173.4	154.2
55.0	144.4	115.6	0	178.0	177
50.0	147.0	116.2			

E: 75% 116°

p-Methylbenzoic acid ($C_8H_8O_2$)
+ 5-Bromo-2-thiophenecarboxylic acid ($C_5H_3O_2BrS$)

Mislow, 1948

%	f.t.	E	%	f.t.	E
100	141	140	50.9	157.0	135.2
93.4	139.6	134.2	42.0	162.0	135.4
81.0	138.2	134.2	30.4	168.8	134.6
71.5	146.2	133.6	13.1	175.8	154.2
60.2	150.6	133.8	0	178	177

E: 86° 134°

4-Isopropylbenzoic acid ($C_{10}H_{12}O_2$) +
4-Dimethylaminobenzoic acid ($C_9H_{11}O_2N$)

Erlenmeyer, Harald and Meyenburg, 1938

mol%	f.t.	E	mol%	f.t.	E
0	239.3	-	90.0	119.0	113.0
20.4	224.2	118.7	93.0	117.5	-
40.5	213.5	117.5	96.0	-	111.5
60.0	185.0	116.0	100.0	119.0	-
80.7	146.3	116.0			

Phenylacetic acid ($C_8H_8O_2$) + Phenylpropionic acid
($C_9H_{10}O_2$)

Salkowski, 1885 and 1901

%	f.t. I	%	f.t. II
0	77	52.4	37.5
10	71.5	37.5	25.5
20	65.5	35	21
30	58	32.5	25.5
40	50		
50	39.5		
60	26.5		
70	27		
80	33		
90	41.5		
100	47.5		

Benzile orthocarbonic acid ($C_{15}H_{10}O_4$) α + β

Vixseboxse, 1919 - 9121

%	f.t.
0	141.5
E	112
100	130

"natural" freezing point=132°

t	f.t.
141	128-126
160	120-119
174	110-112
180	115-115.5
190	118-110.5
200	114

% and 0 unknown

maximum temperature of heating = t

Hydrocinnamic acid ($C_9H_9O_2$) + Cinnamic acid
($C_9H_8O_2$)

Kofler and Brandstätter, 1943

%	f.t.	%	f.t.
0	49	60	105
10	55	70	114
20	60	80	121
24	64	84	124
30	72	90	129
40	86	100	135
50	96		

Cinnamic acid ($C_9H_8O_2$) + p-Methoxycinnamic acid
($C_{10}H_{10}O_3$)

Walter, 1925

mol%	f.t.	clear.point
100	171	187
79.7	-	168
70	-	157
0	133	(90)

Butyl hydrogenphthalate ($C_{12}H_{14}O_4$) d + 1

Lombaers, 1924

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0.450	46.2	-	20.420	48.6	46.8
2.150	44.7	-	28.530	50.8	47.0
2.620	43.7	-	34.925	51.6	47.7
6.045	44.8	-	42.285	52.8	52.0
12.025	46.1	-	50.000	54.1	-
				(1+1)	

Bornyl hydrogenphthalate ($C_{18}H_{22}O_4$) d + 1

Ross and Somerville, 1926

%	f.t.	%	f.t.
0.0	161.4	61.4	162.5
8.4	160.8	73.0	162.1
21.1	160.5	90.3	161.7
40.0	160.9	94.7	162.3
50.3	161.1	100.0	162.8
51.9	162.5		

(1+1)

Dibenzylacetic acid ($C_{16}H_{16}O_2$) +
Di (α -Thenyl) acetic acid ($C_{18}H_{16}O_2S_2$)
Fredga, Aejmelaens and Tollander, 1951

mol%	f.t.	mol%	f.t.
100.0	66.0	57.7	53.4
89.7	62.0	48.4	59.8
80.1	58.0	37.3	69.5
74.0	55.7	28.7	75.2
69.0	53.6	19.5	80.4
63.0	51.7	0.0	88.7

Dibenzylacetic acid ($C_{16}H_{16}O_2$) +
Benzyl (α -thenyl) acetic acid ($C_{14}H_{14}O_2S$)

Fredga, Aejmelaens and Tollander, 1951

mol%	f.t.	mol%	f.t.
100.0	66.8	40.2	72.6
89.5	65.4	28.8	78.0
79.6	64.0	20.2	81.2
69.8	62.6	10.0	85.2
59.0	61.3	0.0	88.7
51.9	66.1		

Benzylsuccinic acid ($C_{11}H_{12}O_4$) d + 1

Fredga and Palm, 1949

mol%	f.t.	mol%	f.t.
0.0	164.5	33.0	159.5
7.6	160.5	34.8	160
12.9	158.5	42.0	161.5
18.8	156	50.0	162.5
24.5	156		(1+1)

Benzylsuccinic acid ($C_{11}H_{12}O_4$) d + α -Thenylsuccinic
acid ($C_9H_{10}O_4S$) d
Fredga and Palm, 1949

mol%	f.t.	mol%	f.t.
100.0	156.5	40.6	157.5
90.5	156	29.6	159.5
80.1	154.5	20.9	161
69.3	154	10.0	162
60.1	155	0.0	164.5
50.5	156.5		

Benzylsuccinic acid 1 ($C_{11}H_{12}O_4$) +
 α -Thenylsuccinic acid d ($C_9H_{10}O_4S$)

Fredga and Palm, 1949

mol%	f.t.	mol%	f.t.
100.0	156.5	43.9	162.5
95.1	153.5	32.9	160
89.4	150	28.0	157.5
85.5	153	24.3	157
79.9	155	19.0	156.5
75.3	157	14.4	159
69.7	158.5	9.9	160.5
61.3	160.5	4.4	163
50.0	163	0.0	164.5

Benzylsuccinic acid rac. ($C_{11}H_{12}O_4$) +
 α -Thenylsuccinic acid rac. ($C_9H_{10}O_4S$)

Fredga and Palm, 1949

mol%	f.t.	mol%	f.t.
100.0	165.5	39.2	160.5
81.8	162	20.7	162
59.9	161	0.0	162.5

β -Phenylethylsuccinic acid ($C_{12}H_{14}O_4$) d + 1

Porath, 1949

%	f.t.	%	f.t.
0	124.0-124.5	33.8	134.3
4.8	120.3	41.6	135.1
9.9	120.5	45.4	136.1
16.7	126.7	50	136.4
21.9	129.1		

(1+1)

α -Phenylhydrocinnamic acid ($C_{15}H_{14}O_2$) d + 1

Pettersson, 1955

%	m.t.		
	I	II	III
0	84	-	-
5	81	-	-
7.5	79.5	-	-
10	80.5	-	-
15	84.5	-	-
20	88	-	75
25	90	-	76
29	92	83	-
35	94	87	78
40	94.5	88	-
44	95.5	-	80.5
50	96	89	81

(1+1)

α -Phenylhydrocinnamic acid (+) ($C_{15}H_{14}O_2$) +
 2-Thenylphenylacetic acid (-) ($C_{13}H_{12}O_2S$)

Pettersson, 1955

mol%	f.t.	m.t.	f.t.
	I		II
0	84	82.5	-
10	80.5	74	-
21	76	71	-
25	73	66	-
30	74	-	69
36	74	-	-
40	75	-	72
45	75.5	-	"
50	"	-	"
56	"	-	71
60	74.5	-	"
65	73	-	69
70	72	-	66
76	71	-	-
80	73.5	68	-
90	79	"	-
100	85	83	-

(1+1)

α -Phenylhydrocinnamic acid (+) ($C_{15}H_{14}O_2$) +
 2-Thenylphenylacetic acid (+) ($C_{13}H_{12}O_2S$)

Pettersson, 1955

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	84	82.5	61	91.5	88.5
10	87	84	70	91	87.5
20	90	85	80	89.5	84
30	91	87.5	90	87	83
40	92	89	100	85	83
51	92.5	89.5			

(1+1)

α -Phenylhydrocinnamic acid (-) ($C_{15}H_{14}O_2$) +
 α -(2-Thienyl)hydrocinnamic acid (+) ($C_{13}H_{12}O_2S$)

Pettersson, 1955

mol%	f.t.	m.t.	f.t.
	I		II
0	84	82.5	-
11	79.5	71	-
20	76	71	-
27	73	-	70
30	75	-	70.5
40	77	-	71.5
51	78	-	72
61	77	-	71
65	76.5	-	70.5
67	75	-	70
70	72	69	-
80	"	"	-
87	"	"	-
95	71.5	68.5	-
97.5	"	69.5	-
100	72	71	-

(1+1)

α -Phenylhydrocinnamic acid (+) ($C_{15}H_{14}O_2$) +
 α (2-Thienyl)hydrocinnamic acid (+) ($C_{13}H_{12}O_2S$)

Pettersson, 1955

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	84	82.5	60	73.5	70
13	79	73	70	72.5	69
21	77	70.5	81	71	67.5
30	73.5	69	86	70.5	67
35	72.5	"	90	70	67.5
41	73	"	96	71	68
50	"	69.5	100	72	71

(1+1)

α -Phenylhydrocinnamic acid (+) ($C_{15}H_{14}O_2$) +
 Thienylthienylacetic acid (-) ($C_{11}H_{10}O_2S_2$)

Pettersson, 1955

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	84	82.5	55	73.5	67
11	81.5	77	59	72.5	66
21	79.5	75	68	70	64
29	77	74	75	67	"
37	76	73	79	69.5	"
45	75	72	87	75	67
49	74.5	70	100	81	79

(1+1)

α -Phenylhydrocinnamic acid (-) ($C_{15}H_{14}O_2$) +
 Thienylthienylacetic acid (-) ($C_{11}H_{10}O_2S_2$)

Pettersson, 1955

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	84	82.5	57.5	69	63.5
10	80.5	77	69	66.5	63
19.5	78	74	79	69.5	62.5
30	76	72	88	74	63
39	73.5	70	100	81	79
49	72	67			

Oxybenzoic acid ($C_7H_6O_3$) o + m

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	201	-	40.2	163	144
90.5	197	144	30	146	143
80.6	193	"	20	150	144
69	186	"	9.5	155	"
61.4	181.5	143.5	0	157	-
49.9	173	144			

Oxybenzoic acid ($C_7H_6O_3$) o + p

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	213	-	42.6	176	146
89.9	210	146	32.3	161	"
79.4	206	"	20.3	149	"
70.3	201	"	10.4	155	"
61	194.5	"	0	157	-
50	185	"			

o-Oxybenzoic acid ($C_7H_6O_3$) + o-Fluorbenzoic acid
 ($C_7H_5O_2F$)

Porath and Claeson, 1950

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0.0	159.0	-	53.2	130.0	126.0
10.8	155.0	140.5	58.5	129.0	125.5
20.0	150.5	133.0	67.2	128.0	124.5
25.1	148.5	130.0	76.1	127.0	123.5
31.2	144.5	130.5	87.7	125.5	123.0
38.0	140.0	128.5	95.6	124.0	123.0
40.2	138.0	127.5	100.0	123.0	-
47.1	130.5	127.5			

o-Oxybenzoic acid ($C_7H_6O_3$) + o-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Lettre¹, Barnbeck and Lege, 1936

%	f.t.	E	%	f.t.	E
100	139	139	40	138	117
85	133	117	30.5	145	"
75	128	"	20	150	"
66	123	"	11	154	"
59	119	"	0	157	157
50	128	"			

o-Oxybenzoic acid ($C_7H_6O_3$) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Lettre¹, 1940

mol%	f.t.	E	mol%	f.t.	E
100	139	-	40	130	112
90	134	112	30	138	"
80	128	"	20	145	"
70	121	"	10	151	"
60	113	"	0	157	-
50	120	"			

Oxybenzoic acid ($C_7H_6O_3$) m + p

Lettre¹, Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	213	-	40	178	174
89	209	174.5	31	184.5	174.5
79.9	205	174	19.6	190	174
70.2	199.5	174.5	11.4	194.5	174
68.8	192	174	0	201	-
50.1	179	174.5			

m-Oxybenzoic acid ($C_7H_6O_3$) + m-Cyanobenzoic acid
($C_8H_5O_2N$)

Claeson, 1956

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	201.5	200.5	59.8	187.0	171.0
10.7	192.5	188.5	68.3	193.0	177.5
19.9	186.0	178.0	76.6	199.0	187.5
31.1	176.5	165.0	87.7	206.0	200.5
39.5	170.0	164.0	100.0	213.5	212.0
50.0	178.5	164.0			

m-Oxybenzoic acid ($C_7H_6O_3$) + m-Fluorbenzoic acid
($C_7H_5O_2F$)

Porath and Claeson, 1950

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0.0	201.5	-	73.8	146.0	124.0
12.4	194.0	180.5	80.1	138.5	121.0
24.9	185.5	168.5	85.2	122.0	121.5
37.0	178.0	157.0	88.6	122.5	121.0
49.7	169.5	146.5	93.3	123.0	122.0
61.0	158.5	136.0	100.0	123.5	-

m-Oxybenzoic acid ($C_7H_6O_3$) + m-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Lettre¹, Barnbeck and Lege, 1936

%	f.t.	E	%	f.t.	E
100	153	152	40	181	139
90	150	140	30	188	"
80	145	139	20	193	"
70	152	"	10	198	140
60	164	"	0	201	200
50	173	"			

p-Oxybenzoic acid ($C_7H_6O_3$) + p-Cyanobenzoic acid
($C_6H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	214.5	213.0	67.6	216.0	213.5
10.0	205.5	198.0	76.9	219.0	217.5
19.2	198.5	190.0	87.7	221.0	219.5
28.1	192.5	198.5	93.8	221.0	219.5
37.2	200.0	190.0	97.3	220.5	219.5
48.1	207.5	201.5	99.1	219.0	218.0
58.1	212.5	209.5	100.0	219.0	218.0

p-Oxybenzoic acid ($C_7H_6O_3$) + p-Fluorbenzoic acid
($C_7H_5O_2F$)

Porath and Claeson, 1950

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0.0	214.5	-	61.8	173.5	163.5
11.6	203.0	188.5	69.4	165.5	163.0
17.7	204.0	181.5	74.5	168.0	163.0
24.6	200.0	174.0	87.6	176.5	168.0
37.2	191.5	165.0	93.1	179.5	173.0
49.4	183.5	163.0	100.0	184.0	-

p-Oxybenzoic acid ($C_7H_6O_3$) + p-Chlorbenzoic acid
($C_7H_5O_2Cl$)

Lettre, Barnbeck and Lege, 1936

%	f. t.	E	%	f. t.	E
100	241	239	40	197	189
90	236	189	30	197	190
80	229	190	20	204	"
70	221	190	10	210	"
60	213	191	0	214	214
50	205	190			

p-Oxybenzoic acid ($C_7H_6O_3$) + m-Nitrobenzoic acid
($C_7H_5O_4N$)

Lettre, 1940

mol%	f. t.	E	mol%	f. t.	E
100	139	-	40	180	155
90	133	127	30	189	"
80	140	"	20	197	"
70	151	"	10	205	"
60	157	"	0	213	-
50	162	-			

(1+1)

Mandelic acid rac ($C_8H_8O_3$) + Chlorphenylacetic
acid ($C_8H_7O_2Cl$)

Lettre, Barnbeck and Lege, 1936

%	f. t.	E	%	f. t.	E
0	117	117	60	84	60
10.2	113	59	70	72	59
19.8	111	59	80	68	"
30	106	60	90	74	"
40	103	60	100	78	78
50	95	60			

Acetylmandelic acid ($C_{10}H_{10}O_4$) d + l

Angus and Owen, 1943

%	f. t.	%	f. t.
100	94.6	70.60	67.0
97.86	92.6	67.70	66.0
94.70	89.6	63.40	69.6
91.30	86.4	63.14	72.4
87.40	83.8	60.50	74.3
82.40	78.8	56.85	75.6
78.25	74.0	52.0	76.8
73.60	70.0	50.0	77.0

E:65° 68.2% (1+1)

Propionylmandelic acid ($C_{11}H_{12}O_4$) d + l

Angus and Owen, 1943

%	f. t.	%	f. t.
100	68.0	73.50	41.4
82.21	65.0	71.20	39.4
94.56	62.4	69.30	40.4
92.10	60.0	68.05	42.2
88.80	56.5	64.30	47.0
86.00	54.4	57.70	49.4
82.83	50.6	52.50	50.2
80.10	48.4	50.00	50.5
77.00	44.6		

E:37.8° 69.5% (1+1)

 α -Phenoxypropionic acid ($C_9H_{10}O_3$) d + l

Fredga and Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	86	84.7	101
50.0	116	89.6	93
60.0	114.5	92.0	85
69.5	111.5	97.1	84
79.3	106.5	100.0	86

(1+1)

Hexahydromandelic acid ($C_8H_{14}O_3$) rac +
Mandelic acid ($C_8H_8O_3$) rac

Lettre, Barnbeck and Staunau, 1936

%	f. t.	m. t.	%	f. t.	m. t.
100	119	118	40	129	124
90	120	118	30	131	126
80	122	119	20	132	128
70	124	120	10	133	131
60	126	121	0	135	134
50	128	123			

Mandelic acid ($C_8H_8O_3$) d + l

Centnerszwer, 1899

%	f. t.	%	f. t.
0.0	132.7	37.7	117.9
5.0	129.9	45.0	119.2
12.5	126.7	50.0	121.0
25.0	120.6		

(1+1)

Adriani, 1900

%	f. t.	%	f. t.
100	132.8	65	115.8
90	128.1	60	113.0
80	123.2	55	116.8
75	120.6	50	118.0
70	118.2		

(1+1)

Angus and Owen, 1943

%	f. t.	%	f. t.
100.0	133.0	65.0	116.1
98.2	131.8	61.7	116.0
90.0	127.7	60.0	117.0
83.8	125.1	57.6	117.5
76.9	121.8	50.0	118.0
69.2	117.5		

E: 63% 114.8° (1+1)

α -Phenoxypropionic acid ($C_9H_{10}O_3$) d +
 α -(1-Naphthoxy)propionic acid d ($C_{13}H_{12}O_3$)

Fredga and Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	86	42.8	91.5
8.2	81.5	52.3	99.5
15.7	77.5	65.2	108.5
24.8	72.5	74.5	113.5
29.0	74	85.3	119
34.9	82	100.0	126

α -Phenoxypropionic acid ($C_9H_{10}O_3$) d +
 α -(1-Naphthoxy)propionic acid ($C_{13}H_{12}O_3$) l

Fredga and Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	86	41.9	90
8.2	81	49.8	96
15.9	77	63.0	106
24.8	72	73.4	112
29.0	73	87.5	120
33.8	81	100.0	126

α -Phenoxypropionic acid ($C_9H_{10}O_3$) l +
 α -(2-Naphthoxy)propionic acid ($C_{13}H_{12}O_3$) d

Fredga and Matell, 1952

mol%	f. t.		mol%	f. t.	
	I	II		I	II
0.0	86	-	46.0	85	84
6.6	83	-	51.8	88	-
16.6	77	-	56.2	93	-
20.9	74.5	-	66.4	102	-
24.9	77	-	78.1	108.5	-
33.2	82	80.5	87.6	113.5	-
36.8	83.5	82	100.0	119	-
42.9	85	83.5	(1+1)		

α -Phenoxypropionic acid ($C_9H_{10}O_3$) l +
 α -(2-Naphthoxy)propionic acid ($C_{13}H_{12}O_3$) l

Fredga and Matell, 1952

mol%	f. t.	mol%	f. t.
0.0	86	53.0	92
8.0	82	63.9	101
16.4	77.5	75.1	107
25.0	71	84.4	112
32.9	67	100.0	119
41.3	79.5		

α -Phenoxypropionic acid ($C_9H_{10}O_3$) +
 α -(4-Chlorphenoxy)propionic acid (+) ($C_9H_9O_3Cl$)

Matell, 1955

%	f. t.	E	%	f. t.	E
100	104.5	103.5	35.6	66.5	63
88.2	99.5	65	26.2	72	"
76.5	93.5	63	17.2	77	"
65.3	87	"	8.4	81.5	70
55.3	80.5	"	0	86	85
45.3	72	"			

α -Phenoxypropionic acid ($C_9H_{10}O_3$) +
 α -(4-Chlorphenoxy)propionic acid (-) ($C_9H_9O_3Cl$)

Matell, 1955

%	f. t.	m. t.	%	f. t.	m. t.
100	104.5	103.5	35.6	93.5	78
87.9	100	90	26.0	89.5	78
76.7	95	"	17.0	84.5	78.5
71.4	92	"	12.8	80.5	78.5
65.9	93.5	"	8.5	81	78
55.5	94.5	91	4.3	83.5	78.5
50.1	95	94.5	0	86	85
45.6	95	80			

(1+1)

α -Phenoxybutyric acid d ($C_{10}H_{12}O_3$) +
 α -Phenoxyvaleric acid d ($C_{11}H_{14}O_3$)

Matell, 1955 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	80	79	60	70.5	64
10	68	64.5	70	76	68
20	62	62	80	80.5	73
30	64	61	90	84	79
40	64.5	61	100	86	85
50	66.5	61.5			

α -Phenoxybutyric acid 1 ($C_{10}H_{12}O_3$) +
 α -Phenoxyvaleric acid d ($C_{11}H_{14}O_3$)

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
0	80	79	60	79	72
10	78	70	70	76.5	"
18 E	70	"	77 E	75	"
30	75.5	"	90	83	"
40	79	"	100	85	84.5
50	80	75			

(1+1)

α -Phenoxyvaleric acid ($C_{11}H_{14}O_3$) d + 1

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
0	86	85	30	111.5	84
4 E	85.5	83	40	114	87
10	98	84	50	114.5	114
20	107	84			

α -Phenoxyvaleric acid d ($C_{11}H_{14}O_3$) +
 α -Phenoxycaproic acid d ($C_{12}H_{16}O_3$)

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
0	86	85	60	74	72.5
20	81	77	80	73.5	71
30	78.5	75	100	77	75
50	75	73.5			

α -Phenoxyvaleric acid 1 ($C_{11}H_{14}O_3$) +
 α -Phenoxycaproic acid d ($C_{12}H_{16}O_3$)

Matell, 1955 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
0	86	85	60	69.5	63
15	80	65.5	73 E	66	64
25	75	65	90	71	64
38 E	69	65	100	76.5	75
50	70	68.5			

(1+1)

α -Phenoxycaproic acid ($C_{12}H_{16}O_3$) d + 1

Matell, 1953 and 1955

%	f. t.	E	%	f. t.	E
0.0	76.5	75	30.0	70	64
9.9	71.5	64	40.1	72.5	65
20.1	67	"	50.0	76.5	75.5
24.9	68.5	"	100.0	76.5	75

(1+1)

Anisic acid ($C_8H_8O_3$) + Anisalpropionic acid
($C_{10}H_{12}O_3$)

Walter, 1925 (fig.)

mol%	f. t.	clear. p.	mol%	f. t.	clear. p.
0	184	155.6	56	129	E
20	174	-	60	132	-
21.0	-	152.3	67.3	-	145.4
40	154	-	80.0	147	143.5
41.5	-	149.6	100.0	154	140.5

Anisic acid ($C_8H_8O_3$) + Ethoxycinnamic acid
($C_{11}H_{12}O_3$)

Walter, 1925

mol%	f. t.	clear. p.	mol%	f. t.	clear. p.
100	171	187	40	-	169
80	-	182	20	-	164
60	-	175	0	184	155.6
43.5	-	169.3			

p-Ethoxybenzoic acid ($C_9H_{10}O_3$) +
p-Methoxycinnamic acid ($C_{10}H_{10}O_3$)

Walter, 1925

mol%	f. t.	clear. p.	mol%	f. t.	clear. p.
100	171	187	45.5	-	175
74.7	-	181	33.8	-	172.5
46.5	-	174.5	0	196	(165)

Anisalpropionic acid ($C_{10}H_{12}O_3$) +
Methoxycinnamic acid ($C_{10}H_{10}O_3$)

Walter, 1925 (fig.)

mol%	f. t.	clear. p.	mol%	f. t.	clear. p.
100	171	187	40	-	159
80	-	176	20	-	151
60	-	169	0	154	(140.5)
48.5	-	162.5			

Methoxycinnamic acid ($C_{10}H_{10}O_3$) +
Cinnamylacrylic acid ($C_{11}H_{10}O_2$)

Walter, 1925

mol%	f. t.	clear point
0	171	187
26.4	-	171.5
53.6	-	159
100	165.6	(131.6)

β -Oxy- β -phenylpivalic acid ($C_{11}H_{14}O_3$) d + l

Matell, 1949-50

%	f. t.	%	f. t.
0.0	158	59.1	137.5
17.2	152	66.5	139
34.6	142.5	76.2	148
45.8	136	83.3	151.5
50.0	134	91.5	155
51.8	135	100.0	158
54.0	136		

Santonous acid d ($C_{15}H_{20}O_4$) +
Desmotoposantonous acid l ($C_{15}H_{20}O_4$)

Levi-Malvano and Mannino, 1908

%	f. t.	%	f. t.
100	175	50	151
82.4	167	49.8	151
76	164	46.9	153.6
70.2	160	44.8	155
65	156.6	23.1	167.4
52.3	149	0	180

Santonous acid 1 ($C_{15}H_{20}O_4$) +
Desmotroposantonous acid 1 ($C_{15}H_{20}O_4$)

Levi-Malvano and Mannino, 1908

%	f.t.	%	f.t.
100	175	45.6	156.4
65.8	156.4	26.8	167
54.4	152	0	180
50	154		

β -Benzoylhydratropic acid ($C_{16}H_{14}O_3$) d + 1

Bickel and Peaslee, jr., 1948

%	f.t.	%	f.t.
100	182.1	60	160.2
90	177.8	56	157.3
80	173.3	53	155.5
70	167.1	50	153.9

Benzylamino-succinic acid ($C_{11}H_{13}O_4N$) d + 1

Centnerszwer, 1899

%	f.t.	%	f.t.
100.0	129.9	40.6	130.2
90.6	125.7	30.8	129.9
80.8	124.6	20.3	127.8
70.8	127.7	10.4	129.0
60.9	129.1	0.0	130.5
50.8	131.0		

(1+1)

l-Asparagine-acetylmandelate ($C_{14}H_{16}O_6N_2$) 1 + d

Adembri, 1954 (fig.)

%	f.t.	%	f.t.
0	178	60	168
10	170	70	165
20	166 E	80	159 E
30	168	90	165
40	169.5	100	174
50	170		

(1+1)

o-Fluorbenzoic acid ($C_7H_5O_2F$) +
o-Chlorbenzoic acid (C_7H_5OCl)

Porath and Claeson, 1950

mol%	f.t.	m.t.	mol%	f.t.	m.t.
100.0	142.0	-	38.1	117.5	115.5
88.3	137.5	127.5	34.4	118.0	115.0
75.7	131.5	119.5	24.6	119.0	115.5
61.1	125.0	115.5	17.4	119.5	115.0
52.5	120.5	115.0	11.7	120.5	116.5
45.4	117.5	115.5	6.8	121.5	117.0
42.1	115.5	-	0.0	123.0	-

m-Fluorbenzoic acid ($C_7H_5O_2F$) +
m-Chlorbenzoic acid (C_7H_5OCl)

Porath and Claeson, 1950

mol%	f.t.	m.t.	mol%	f.t.	m.t.
100.0	157.5	-	29.9	122.0	115.0
87.5	152.0	142.5	23.4	118.5	"
76.3	147.0	135.0	16.9	117.5	"
59.6	139.5	128.5	11.0	119.5	115.5
49.4	135.0	123.5	5.1	121.5	118.5
36.3	127.5	118.0	0.0	123.5	-

m-Fluorbenzoic acid ($C_7H_5O_2F$) + m-Cyanobenzoic
acid ($C_8H_5O_2N$)

Claeson, 1956

mol%	f.t.	m.t.	mol%	f.t.	m.t.
100	123.5	122.5	51.2	182.5	158.0
94.9	121.5	119.5	41.2	192.0	170.0
88.6	121.5	119.0	32.6	196.0	181.0
79.6	145.5	119.5	21.4	202.5	190.0
69.8	162.5	120.5	11.8	207.0	201.0
60.7	173.0	137.5	0	213.5	212.0

p-Fluorbenzoic acid ($C_7H_5O_2F$) + p-Chlorbenzoic
acid (C_7H_5OCl)

Porath and Claeson, 1950

mol%	f.t.	m.t.	mol%	f.t.	m.t.
100.0	243.0	-	23.6	191.0	181.5
88.8	235.5	229.0	12.2	183.5	181.0
72.5	236.0	215.0	9.8	183.0	181.5
58.3	216.5	203.0	7.4	183.5	181.0
49.1	209.5	191.5	3.7	183.5	182.0
37.8	201.0	186.0	0.0	184.0	-

p-Fluorbenzoic acid ($C_7H_5O_2F$) + p-Cyanobenzoic acid ($C_8H_5O_2N$)

Claeson, 1956

mol %	f. t.	m. t.
0	181.5	180.0
9.9	177.5	175.5
18.3	175.5	174.5
28.2	179.5	176.0
39.5	186.0	181.0
49.5	193.0	188.5
58.9	198.5	194.0
69.1	203.0	200.0
76.6	207.0	204.0
89.8	213.5	212.0
100.0	219.0	218.0

Chlorbenzoic acid ($C_7H_5O_2Cl$) o + m

Bornwater and Holleman, 1912

%	f. t.	E
0	140.7	-
11.13	133.7	-
22.67	125.9	-
33.38	118.8	112.2
43.6	112.2	110.6
43.42	112.0	"
47.1	111.3	110.1
50.24	114.5	109.9
51.14	114.9	"
54.49	119.2	110.3
66.18	129.6	-
80.2	141.0	-
88.53	146.9	-
100	155.0	-

Johnston and Jones, 1928

mol%	f. t.	mol%	f. t.
0.0	139.9	47.9	111.3
9.6	135.1	49.9	114.3
19.9	128.5	59.2	123.8
28.6	122.8	69.1	132.6
29.3	122.2	76.5	138.7
41.7	112.6	84.3	144.3
		90.2	148.2
		100	153.5

Chlorbenzoic acid ($C_7H_5O_2Cl$) m + p

Bornwater and Holleman, 1912

%	f. t.	E
0	155.0	-
9.34	148.7	140.8
14.30	145.2	140.9
23.26	150.6	140.7
25.74	156.0	140.6
32.36	168.9	140.6
37.10	177.4	140.6
43.00	185.8	140.6
49.55	194.5	140.6
100	239.0	140.6

Johnston and Jones, 1928

mol%	f. t.	mol%	f. t.
0.0	153.5	54.1	200.2
9.1	149.0	65.0	212.7
14.7	145.3	76.2	222.7
22.7	145.4	90.4	233.3
37.1	176.0	100.0	239.5
50.8	196.2		

m-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
2,5-Dichlorbenzoic acid ($C_7H_4O_2Cl_2$)

Hope and Riley, 1923

mol %	f. t.	E
100	154.4	-
82	144.4	-
76.7	141.6	-
65.6	134.7	-
61.9	131.5	-
55.1	126.3	-
53.6	124.7	121.8
52.0	122.8	121.3
51.0	121.8	121.2
49.0	122.3	119.7
48.0	122.3	119.8
45.9	122.0	119.7
44.0	121.8	119.6
42.1	121.3	119.6
38.2	122.0	-
32.6	129.3	119.4
26.0	136.0	-
17.6	142.5	-
0	155.0	-
(1+1)		

Chlorbenzoic acid ($C_7H_5O_2Cl$) o + p

Bormwater and Holleman, 1912

%	f. t.	E	%	f. t.
0	140.7	-	33.7	176.7
9.47	135.4	132.0	42.53	189.8
18.27	140-141	"	46.91	195.2
21.9	152.3	132.1	100	239.0
25.48	160.9	-		

Johnston and Jones, 1928

mol%	f. t.	mol%	f. t.
0.0	139.9	40.7	186.9
6.7	137.0	60.6	209.4
11.1	134.3	73.1	220.9
15.2	134.9	77.4	223.6
22.5	153.0	90.4	233.5
25.7	160.3	100.0	239.5
29.9	170.1		

o-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
m-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f. t.	E	mol%	f. t.	E
100	139	-	40	130	124
90	133	120	30	128	"
80	121	"	20	126	"
70	127	"	10	134	"
60	130	"	0	139	-
50	131	-			

(1+1)

m-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
m-Cyanobenzoic acid ($C_8H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	155.5	155.0	51.4	186.0	172.0
5.8	156.0	155.0	61.0	192.5	179.5
11.7	158.0	156.5	70.4	197.5	187.5
16.7	161.0	157.5	78.9	202.5	193.5
22.7	164.5	160.0	89.1	208.0	201.5
32.6	171.5	162.0	100.0	213.5	212.0
41.5	179.0	165.0			

m-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
o-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f. t.	E	mol%	f. t.	E
100	147	-	40	135	134
90	141	130	30	136	"
80	135	"	20	141	"
70	131	"	10	147	"
60	134	"	0	153	-
50	136	-			

(1+1)

m-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
o-Brombenzoic acid ($C_7H_5O_2Br$)

Lettre', Barnbeck and al., 1937

%	f. t.	E	%	f. t.	E
0	153	-	60	118	112
10	148.5	112	70	128	"
20	143	"	80	134	113
30	136	"	90	141	"
40	130	"	100	146	-
50	121	"			

m-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
p-Brombenzoic acid ($C_7H_5O_2Br$)

Lettre', Barnbeck and al., 1937

%	f. t.	E	%	f. t.	E
0	153	-	60	220	143
10	149	143	69.5	230	"
20	148	"	80	239	"
30	170	"	90	247	"
40	191	"	100	251	-
50	208	"			

p-Chlorbenzoic acid ($C_7H_5O_2Cl$) +
m-Brombenzoic acid ($C_7H_5O_2Br$)

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
0	240	-	60	193	138
10	234	138	70	178	"
20	229	"	79.7	153	"
30	222	"	99.1	147	"
40	215	"	100	155	-
49.7	204	"			

p-Chlorbenzoic acid ($C_7H_5O_2Cl$) + p-Cyano-benzoic
acid ($C_6H_5O_2N$)

Claeson, 1956

mol%	f.t.	f.t.	mol%	f.t.	m.t.
0	240.0	238.5	63.5	222.5	219.5
6.9	238.0	236.5	69.3	221.5	219.5
13.9	236.5	234.5	73.9	220.5	219.0
20.9	235.0	232.0	79.7	220.5	219.0
31.9	232.0	229.0	84.3	219.5	218.5
42.1	229.0	225.5	90.7	219.0	218.0
52.6	226.5	222.0	100.0	219.0	218.0
60.6	223.5	219.0			

Dichlorbenzoic acid ($C_7H_4O_2Cl_2$) 2,5 + 2,3

Hope and Riley, 1923

%	f.t.	%	f.t.
0	154.4	44.0	128.3
9.6	143.4	45.1	127.9
20.8	141.0	45.6	127.3
30.1	133.9	47.1	128.0
32.0	132.6	50.0	131.0
33.0	131.2	51.5	132.8
34.0	130.2	57.5	138.3
34.7	130.1	66.1	145.7
35.5	130.0	69.0	148.4
37.2	129.6	82.7	157.6
38.2	129.5	100.0	168.3
40.6	129.3		

Brombenzoic acid ($C_7H_5O_2Br$) o + m

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	155	-	40	122	113
90	148	114	30	130	"
80	142	113	20	136	"
70	135	"	10	141	"
60	126	"	0	146	-
50	114	"			

Brombenzoic acid ($C_7H_5O_2Br$) o + p

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	251	-	40	192	137
90	243	137	30	176	"
80	239	"	20.3	158	"
70	228	"	10	140	"
60	217	"	0	146	-
50	207	"			

o-Brombenzoic acid ($C_7H_5O_2Br$) +
m-Nitrobenzoic acid ($C_7H_5O_4N$)

Lettre', 1940

mol%	f.t.	E	mol%	f.t.	E
100	139	-	40	123	121
90	133	117	30	129	"
80	125	"	20	135	"
70	118	"	10	141	"
60	121	"	0	148	-
50	123	-			(1+1)

Brombenzoic acid ($C_7H_5O_2Br$) m + p

Lettre', Barnbeck and al., 1937

%	f.t.	E	%	f.t.	E
100	251	-	40	198	137
90	247	137	29.7	180	"
80.3	239	"	20	156	"
70.3	231	"	10	148	"
60	223	"	0	155	-
50	210	"			

m-Brombenzoic acid ($C_6H_5O_2Br$) +
m-Cyanobenzoic acid ($C_6H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	150.0	148.5	48.3	184.0	160.5
6.3	146.0	144.0	57.3	189.5	171.0
10.9	143.0	137.0	67.2	195.0	182.0
13.6	142.0	136.0	76.0	200.5	189.0
19.4	150.0	136.0	83.4	204.0	196.0
25.2	157.5	136.5	91.7	209.0	203.5
37.6	173.5	142.5	100	213.5	212.0

p-Brombenzoic acid ($C_6H_5O_2Br$) +
p-Cyanobenzoic acid ($C_6H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	254.0	253.0	66.4	237.0	229.5
12.7	251.0	250.0	76.0	229.5	222.5
25.8	249.5	248.0	83.4	224.5	221.5
36.9	247.0	244.5	91.7	220.5	219.0
47.2	245.0	241.0	100	219.0	218.0
63.2	239.0	232.0			

p-Brombenzoic acid ($C_6H_5O_2Br$) +
5-Brom-2-thiophene carboxylic acid (C_5H_4BrS)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	141	140	41.2	228.4	137.4
95.0	143.8	139.0	29.8	237.8	137.8
81.6	181.6	137.6	19.4	245.6	137.8
74.3	187.6	137.6	15.4	249.0	137.8
60.7	206.6	137.8	0	253	252
56.6	210.4	137.6	E: 97%	138°	

Iodobenzoic acid ($C_7H_5O_2I$) o + m

Lettre' and Lehmann, 1938

%	f. t.	E	%	f. t.	E
0	162	-	60	154	132
10	156	132	70	167	"
20	150	"	80	175	"
30	142	"	90	181	"
40	135	"	100	187	-
50	146	"			

Iodobenzoic acid ($C_7H_5O_2I$) o + p

Lettre' and Lehmann, 1938

%	f. t.	E	%	f. t.	E
0	162	-	60	232	153
10	155	153	70	244	"
20	167	"	80	253	"
30	188	"	90	260	"
40	206	"	100	267	-
50	220	"			

o-Iodobenzoic acid ($C_7H_5O_2I$) + m-Nitrobenzoic
acid ($C_7H_5O_4N$)

Lettre' , 1940

mol%	f. t.	E	mol%	f. t.	E
100	139	-	40	139	115
90	133	116	30	146	116
80	126	115	20	152	115
70	118	"	10	158	116
60	121	"	0	162	-
50	130	"			

Iodobenzoic acid ($C_7H_5O_2I$) m + p

Lettre' and Lehmann, 1938

%	f. t.	E	%	f. t.	E
0	187	-	60	238	172
10	179	172	70	246	"
20	173	"	80	254	"
30	195	"	90	261	"
40	216	"	100	267	-
50	229	"			

m-Iodobenzoic acid ($C_7H_5O_2I$) + m-Cyanobenzoic acid
($C_6H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	185.5	184.5	62.5	192.0	165.0
9.5	180.5	174.0	71.4	199.5	173.0
16.1	177.0	168.5	80.1	203.5	188.5
30.5	171.0	164.0	87.1	207.0	196.0
42.1	175.5	164.5	93.3	209.5	203.0
53.7	187.0	164.5	100.0	213.5	212.0

p-Iodobenzoic acid ($C_7H_5O_2I$) + p-Cyanobenzoic acid
($C_6H_5O_2N$)

Claeson, 1956

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0.0	269.5	268.0	50.0	251.0	249.0
9.6	263.5	259.0	60.2	249.0	245.0
16.7	259.0	254.5	69.3	245.0	237.5
21.5	256.5	252.5	79.1	238.5	227.0
29.9	254.5	250.0	89.5	232.0	220.0
38.9	252.0	249.0	100.0	219.0	218.0

α -(4-Chlorophenoxy)propionic acid ($C_9H_9O_3Cl$)
(+) + (-)

Matell, 1955

%	f. t.	E	%	f. t.	E
0	104.5	103.5	85.1	101.5	98
50.0	115.5	114.5	89.9	101.5	98
60.2	114.5	99	95.0	103	97
70.0	111.5	98	100	104.5	103.5
80.0	106	98			

α -(2,4-Dichlorphenoxy)-propionic acid (+) ($C_9H_8O_3Cl_2$)
 α -(2,4-Dinitrophenoxy)-propionic acid (-) ($C_9H_8O_7N_2$)

Matell, 1953

%	f. t.
0	122.5-120.5
E	107
100	174-171.5

α -(2,4-Dichlorphenoxy)-propionic acid (-) ($C_9H_8O_3Cl_2$)
 α -(2,4-Dinitrophenoxy)-propionic acid (-) ($C_9H_8O_7N_2$)

Matell, 1953

%	f. t.
0	122.5-120.5
E	119.5
(1+1)	136
E	131
100	174-171.5

α -(2,4-Dichlorphenoxy)propionic acid ($C_9H_8O_3Cl_2$)
(+) + (-)

Matell, 1953

%	f. t.	m. t.
0	123	122.5
E	110	109
(1+1)	118	117

α -(2,4-Dichlorphenoxy)-propionic acid (+) ($C_9H_8O_3Cl_2$)
 α -(2-Naphthoxy)-propionic acid (+) ($C_{13}H_{12}O_3$)

Matell, 1952

%	f. t.
100	119
-	105.5 E
0	123

α -(2,4-Dichlorphenoxy)-propionic acid (-) ($C_9H_8O_3Cl_2$)
 α -(2-Naphthoxy)-propionic acid (+) ($C_{13}H_{12}O_3$)

Matell, 1952

mol%	f. t.
100	119
50	99 (1+1)
-	95-96 E
0	123

1264 α (3,4-DICHLORPHENOXY)PROPIONIC ACID (+) + α (2-NAPHTHOXY)PROPIONIC ACID (+)

α -(3,4-Dichlorphenoxy)-propionic acid (+) ($C_9H_8O_3Cl_2$)
+ α -(2-Naphthoxy)-propionic acid (+) ($C_{13}H_{12}O_3$)

Matell, 1952

%	f.t.
100	119
E	88
0	121

α -(3,4-Dichlorphenoxy)-propionic acid (-) ($C_9H_8O_3Cl_2$)
+ α -(2-Naphthoxy)-propionic acid (+) ($C_{13}H_{12}O_3$)

Matell, 1952

%	f.t.
100	119
(1+1)	95
E	91-93
0	121

2,4,5-Trichlorphenoxypropionic acid (+) ($C_9H_7O_3Cl_3$)
+ 2-Naphthoxypropionic acid (-) ($C_{13}H_{12}O_3$)

Matell, 1953

mol%	f.t.	mol%	f.t.
0.0	144.5	63.9	116
11.8	137	71.5	114
24.3	130	76.5	110.5
34.3	124.5	80.8	109
43.7	119	87.1	112.5
49.3	118.5	92.9	115
53.5	118.5	100.0	118
59.0	117.5		

2,4,5-Trichlorphenoxypropionic acid (-) ($C_9H_7O_3Cl_3$)
+ 2-Naphthoxypropionic acid (-) ($C_{13}H_{12}O_3$)

Matell, 1953

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0.0	144.5	126	62.9	117.5	102.5
18.6	135	121	67.3	115.5	105
32.9	125.5	115	72.8	113	108
40.5	120	111.5	80.6	111	-
48.4	119	109	90.7	115.5	-
56.6	118.5	105	100.0	118	-

α -(2,4-Dichlorphenoxy)-butyric acid ($C_{10}H_9O_3Cl_2$)
(+) + (-)

Matell, 1953

%	f.t.
0	91.6-91
E	75.5
(1+1)	82

Nitrobenzoic acids ($C_7H_5O_4N$)

Widmann, 1877

%	f.t.		
	o+m	o+p	m+p
0	149	149	140-141
1.0	146	145	135-136
2.0	146	147	134-135
4.8	144	145	132-133
9.1	140	141	130-155
33.3	125	142-190	127-185
50.0	92-98	200	165-205
66.7	112-149	210-216	195-208
90.9	132-133	200-225	205-230
95.2	132-140	222-235	215-234
98	132-134	228-235	232-237
99	132-135	233-237	236-238
100	140-141	238	238

Nitrobenzoic acid ($C_7H_5O_4N$) m + p

Holleman, 1914

%	f.t.	%	f.t.	E
100	240.0	38.0	177.6	-
83.9	228.3	31.5	164.4	-
74.7	220.9	24.2	148.4	-
65.1	212.8	20.4	-	129.7
56.0	202.2	9.1	132.8	-
49.3	195.0	0	140.8	-

Nitrosalicylic acid ($C_7H_5O_5N$) 1,2,3 + 1,2,5

Govaert, 1929

%	f. t.	%	f. t.
0	144.5	32.24	167.5
3.53	142	40.09	177.5
8.62	137.7	49.48	186.5
13.3	134.7	56	193
18.03	136	68.47	204
23.77	151	82.5	217

Chlornitrobenzoic acid ($C_7H_4O_4NCl$) 1,2,5 + 1,2,3

Holleman, 1901 and 1910

%	f. t.
0	164.0
8.0	159.7
12.7	157.0
17.0	154.4
100	185.0

E : 130.5

Chlornitrobenzoic acid ($C_7H_4O_4NCl$) 1,3,6 + 1,3,2

Holleman, 1901 and 1910

%	f. t.
0	139
16.7	141.5
21.4	151.5
100	235

E : 130.5

Bromnitrobenzoic acid ($C_7H_4O_4NBr$) 1,2,5 + 1,2,3

Holleman, 1901 and 1910

%	f. t.
0	180.0
10.7	172.5
15.2	169.5
19.0	166.5
100	191.0

E : 140.5

Bromnitrobenzoic acid ($C_7H_4O_4NBr$) 1,3,6 + 1,3,2

Holleman, 1901 and 1910

%	f. t.
0	140.0
14.7	149.0
19.1	162.5
100	250

5-Nitro-2,4-dichlorbenzoic acid ($C_7H_3O_4NCl_2$) +
5-Nitro-4-oxy-2-chlorbenzoic acid ($C_7H_4O_5NCl$)

Grimm, Gunther and Tittus, 1931 (fig.)

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	202	202	60	175	171
10	197.5	196.5	70	170	166.5
20	193.5	191	80	166	163
30	189	186	90	162	160
40	184	180	100	160	160
50	179.5	176			

 α -2,4-Dinitrophenoxypropionic acid (-) ($C_9H_8O_7N_2$)
+N-(2,4-Dinitrophenyl)- α -alanine (+) ($C_9H_9O_6N_3$)

Matell, 1953

%	f. t.
0	175-178
E	160
(1+1)	167
E	139.5
100	171.5-174

5-Nitrohydrindene-2-carboxylic acid ($C_{10}H_9O_4N$)
d + l

Mills, Parker and Prowse, 1914

%	f. t.	%	f. t.
0	116	30	118.5
10	109.5	40	121
11.7	107.5 E	50	122.0 (1+1)
20	113.5		

α -(1-Naphthyl)-propionic acid ($C_{15}H_{12}O_2$) +
 α -(3-Thianaphthenyl)-propionic acid ($C_{15}H_{10}O_2S$)

Sjöberg, 1956 (fig.)

mol%	f. t.	mol%	f. t.
0	70	60	102
10	60	70	101
20	95	80	98
30	100	90	84
40	103	97	62
50	103 (1+1)	100	66

α -1-Naphthyl-methyl-propionic acid ($C_{14}H_{14}O_2$)
 (+) + (-)

Matell, 1953

%	f. t.	m. t.	%	f. t.	m. t.
0.0	102	100.5	35.1	88	82
10.2	98	86	39.9	89.5	84
20.1	93	82	44.8	90.5	87
30.0	87.5	82	50.0	91	89.5

α -2-Naphthyl-methyl-propionic acid ($C_{14}H_{14}O_2$)
 (+) + (-)

Matell, 1953

%	f. t.	%	f. t.
0.0	85	79.4	86
50.0	90.5	85.2	83.5
59.4	90	89.6	82
69.8	88.5	94.9	83
77.3	86.5	100.0	85

α -2-Naphthylmethylpropionic acid (-) ($C_{14}H_{14}O_2$) +
 α -2-Naphthylthiapropropionic acid (+) ($C_{15}H_{12}O_2S$)

Matell, 1953

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100.0	53.5	52	33.3	67.5	65
94.6	53	50	28.1	70	66
88.5	52	49		(67.5)	-
83.7	52.5	49.5	18.7	76	66.5
78.2	56	49.5		(68)	-
68.3	60.5	51	9.7	81	75
58.1	64	59		(68.5)	-
48.1	66	62.5	0.0	85	84
42.9	66.5	64		(69.5)	-
37.8	67	64.5			-

2-Naphthylmethylpropionic acid (+) ($C_{14}H_{14}O_2$) +
 2-Naphthylthiapropropionic acid ($C_{15}H_{12}O_2S$) (-)

Matell, 1953

mol%	f. t.	m. t.	mol%	f. t.	m. t.
100.0	53.5	52	38.3	73	70
96.7	53	48	33.2	73.5	71
92.5	51.5	"	28.5	74	72
89.3	52.5	"	19.2	74	72
83.4	58	"	16.0	77	72
76.2	63	50		(74)	-
67.1	66.5	58	9.6	81	72
62.1	68.5	62		(73)	-
57.7	69.5	65	0.0	85	84
54.0	70.5	66.5		(69.5)	-
47.4	72	69			-

α -1-Naphthoxy-propionic acid (+) + (-) ($C_{13}H_{12}O_3$)

Matell, 1951 (fig.)

%	f. t.	%	f. t.
100	126	50	154
94	124	40	152
90	132	30	148
80	143	20	142
70	149	7	124
60	152	0	126

(1+1)

Fredga and Matell, 1952				Fredga and Matell, 1952			
mol%	f. t.	mol%	f. t.	mol%	f. t.	mol%	f. t.
100.0	126	79.4	144	100.0	119	55.0	100.5
97.4	125.5	69.7	150	84.9	111.5	50.6	101 (1+1)
95.0	124.5	60.2	152.5	75.6	105.5	45.7	100 E
92.3	128	55.0	153	69.8	102.5	41.4	102
88.5	134	50.0	153.5 (1+1)	65.7	99.5	35.1	106
84.6	139.5			62	98	29.9	109
				61.7	98.5	15.4	118
				58.8	99.5	0.0	126
α (1-Naphthoxy)propionic acid (+) ($C_{13}H_{12}O_3$) + α (2-Naphthoxy)propionic acid (-) ($C_{13}H_{12}O_3$)				α (2-Naphthoxy)propionic acid. ($C_{13}H_{12}O_3$) (+) + (-)			
Matell, 1951 (fig.)				Matell, 1951 (fig.)			
mol%	f. t.	mol%	f. t.	%	f. t.	%	f. t.
100	119	40	106	0	119	60	112
80	108	20	121	10	114	70	111
70	102	0	126	21	105	79	105
57	90			30	110	90	116
				40	112	100	119
				50	113		(1+1)
Fredga and Matell, 1952				Fredga and Matell, 1952			
mol%	f. t.	mol%	f. t.	mol%	f. t.	mol%	f. t.
100.0	119	50.6	96.5		I III I		
84.9	111	40.8	105	50.0	108.5	114	74.7 108
69.9	103	29.4	113.5	54.9	108	113.5	79.8 107
60.3	95.5	15.2	120	59.5	-	113	85.5 111
57	(91) E	0.0	126	65.0	106.5	112	90.4 115
54.9	92			70.0	105	110.5	100.0 119 (1+1)
α (1-Naphthoxy)propionic acid (-) ($C_{13}H_{12}O_3$) + α (2-Naphthoxy)propionic acid (-) ($C_{13}H_{12}O_3$)				α (2-Naphthoxy)butyric acid (+) ($C_{14}H_{14}O_3$) + α (2-Naphthoxy)valeric acid (-) ($C_{15}H_{16}O_3$)			
Matell, 1951 (fig.)				Matell, 1955 (fig.)			
mol%	f. t.	mol%	f. t.	%	f. t.	E	% f. t. E
100	119	48	100	100	141	140	43 E 115.5 114
80	108	30	109	80	133	115	30 125 115
64	98	20	116	53 E	115	114	10 134 115
50	101	0	127	50	115.5	114	0 135.5 135
							(1+1)

α (2-Naphthoxy)butyric acid (+) ($C_{14}H_{14}O_3$) +
 α (2-Naphthoxy)valeric acid (+) ($C_{15}H_{16}O_3$)

Matell, 1955 (fig.)

%	f. t.	m. t.	%	f. t.	m. t.
100	142	141	39	123.5	122
80	136	131.5	30	125	122
60	128	125	10	132	128
50	125.5	123	0	135	134

α (2-Naphthoxy)valeric acid ($C_{15}H_{16}O_3$) (+) + (-)

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
100	142	141	60	121	119
90	137	121	58 E	120	119
80	131.5	120	50	123	122
70	126	119.5			

α (2-Naphthoxy)valeric acid (+) ($C_{15}H_{16}O_3$) +
 α (2-Naphthoxy)caproic acid (+) ($C_{16}H_{18}O_3$)

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
100	135	134.5	50	135	133.5
90	135	133.5	40	135.5	134.5
80	134.5	133	20	138	135.5
70	134.5	132	0	142.5	142
60	134.5	132.5			

α (2-Naphthoxy)valeric acid (-) ($C_{15}H_{16}O_3$) +
 α (2-Naphthoxy)caproic acid (+) ($C_{16}H_{18}O_3$)

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
100	135	135	20	129	106.5
80	125	106.5	10	139	108
54	108	106.5	0	142	142
40	122	106.5			

α (2-Naphthoxy)caproic acid ($C_{16}H_{18}O_3$) (+) + (-)

Matell, 1953

%	f. t.	E	%	f. t.	E
0.0	135	134.5	42.4	111	108.5
10.2	131	110	44.9	109.5	108
20.2	125.5	109.5	47.5	109	108
30.0	119.5	108	50.0	110	108.5
39.9	113	108	100.0	135	134.5

Matell, 1955 (fig.)

%	f. t.	E	%	f. t.	E
0	135	-	40	113	108
10	130.5	110	47 E	108	108
20	125	111	50	110	108.5
30	120	108.5			

α (2-Naphthyl-sulfide-propionic) acid ($C_{14}H_{12}O_3S$)
 (+) + (-)

Matell, 1953

%	f. t.	m. t.	%	f. t.	m. t.
0.0	54	53	88.8	68	48.5
50.0	87.5	85.5	93.9	60	48.5
59.2	86	78	97.6	54.5	49
70.8	82	68	100.0	54	53
79.3	77.5	60			

(1+1)

Furoic acid ($C_5H_4O_3$) + 2-Thiophenecarboxylic
 acid ($C_5H_4O_2S$)

Mislow, 1948

%	f. t.	m. t.	%	f. t.	m. t.
0	133	132	71.5	113.0	101.2
7.8	131.0	120.5	78.0	115.2	101.1
18.8	127.2	112.0	85.2	122.6	106.1
33.3	118.0	102.2	90.8	123.4	106.7
37.8	115.2	100.9	95.5	126.3	111.4
49.2	107.6	100.0	100.0	128	127
57.9	106.8	98.8			

E : 54% 100°

Furoic acid ($C_5H_4O_3$) + 2-Pyrrolcarboxylic acid
($C_5H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
0	133	132	58.5	-	124.0
8.7	129.2	125.2	70.5	166.8	125.2
18.6	131.4	123.2	80.2	-	126.4
29.6	144.6	122.6	90.0	-	125.6
39.8	149.6	124.0	100.0	190	190
49.0	-	125.4			

E: 15% 124°

Thiophenecarboxylic acid ($C_5H_4O_2S$) 1 + 2

Voerman, 1907

%	f. t.	m. t.	%	f. t.	m. t.
0	126.	-	30.55	114.3	110
0.9	125.4	123.9	33.80	113.3	110.5
1.75	125.1	-	36.75	112.5	110.8
3.44	124.6	123.1	49.30	111.5	110.5
5.70	124.1	121.0	42.00	111.0	110.7
6.40	123.4	-	45.00	112.6	110.8
9.40	122.2	-	49.15	115.0	110.7
11.80	121.3	118	57.50	119.6	110.7
14.18	120.3	116.6	61.10	121.2	111.2
15.00	120.1	-	66.40	124.0	116.5
20.55	117.7	113.5	76.20	128.2	123.5
22.55	117.2	112	86.00	132.6	129.5
24.70	116.3	110.8	94.60	136.3	134
25.40	116.0	110.6	100	138.4	-

2-Thiophenecarboxylic acid ($C_5H_4SO_2$) +
2-Pyrrolcarboxylic acid ($C_5H_5O_2N$)

Mislow, 1948

%	f. t.	m. t.	%	f. t.	m. t.
0	128	127	48.2	164.0	125.0
9.7	129.4	121.8	59.4	-	125.2
19.4	140.6	121.8	75.5	-	134.2
29.0	154.6	125.0	82.6	-	141.6
38.7	158.4	126.4	100	190	190

E: 5% 124°

2-Thiophenecarboxylic acid ($C_5H_4O_2S$) +
5-Thiazolcarboxylic acid ($C_4H_3O_2NS$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	220	218	36.2	176.2	114.2
94.8	209.4	118.2	25.9	159.6	114.2
80.6	201.8	115.0	5.0	124.6	116.0
64.1	192.2	114.8	0	128	127
53.2	183.6	115.4			

E: 11% 116°

5-Methyl-2-thiophenecarboxylic acid ($C_6H_6O_2S$) +
5-Bromo-2-thiophenecarboxylic acid ($C_5H_3O_2SBr$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	141	140	39.8	125.2	117.2
88.2	140.2	135.0	36.0	127.6	117.4
80.3	139.0	128.6	27.2	128.8	117.2
74.8	137.8	127.4	24.1	131.4	117.0
71.2	135.4	119.0	15.2	133.6	124.8
62.1	133.0	118.0	11.2	136.0	128.6
50.0	129.0	117.1	0	139	138
47.7	124.8	117.2			

E: 44% 117°

1,2-Dithiacyclopropane-3,5-dicarboxylic acid
($C_5H_6O_4S_2$) (+) + (-)

Schotte, 1956 (fig.)

%	f. t.	%	f. t.
0	186.5	30	187.5
10	175 E	40	191
20	182	50	194.5

(1+1)

1,2-Dithiacycloheptane-3,7-dicarboxylic acid
($C_9H_{14}O_4S_2$) (+) + (-)

Schotte, 1956 (fig.)

%	f. t.	%	f. t.
0	173	50	158.5
20	165	60	165
30	160	80	179.5
42	153 E	100	192

**TETRAGYDROTHIOPHENE-2,5-DICARBOXYLIC ACID
+ 1,2-DITHIACYCLOPROPANE-3,5-DICARBOXYLIC ACID**

Tetrahydrothiophene-2,5-dicarboxylic acid (+)
($C_6H_8O_4S$) + 1,2-Dithiacyclopropane-3,5-dicarboxylic acid (+) ($C_5H_6O_4S_2$)

Schotte, 1956 (fig.)

%	f.t.	%	f.t.
0	180	60	156
10	173	70	162
20	165.5	80	169.5
30	159.5	90	178
40	154	100	186
51	147 E		

Tetrahydrothiophene-2,5-dicarboxylic acid (+)
($C_6H_8O_4S$) + 1,2-Dithiacyclopropane-3,5-dicarboxylic acid (-) ($C_5H_6O_4S_2$)

Schotte, 1956 (fig.)

%	f.t.	%	f.t.
0	180	60	158
20	165	63	157 E
30	158.5	70	163
36	155.5	90	180
50	158	100	187

α -(2-Thienyl)hydrocinnamic acid ($C_{13}H_{12}O_2S$)
(+) + (-)

Petterson, 1954

%	f.t.	E	%	f.t.	E
0.0	72	71	30.5	70.5	63.5
10.0	68.5	64	35.0	72	63.5
15.0	66.5	63.5	44.0	74	64
20.5	65.5	64	50.0	75	74
25.0	68	63.5			

(1+1)

α -(2-Thienyl)hydrocinnamic acid (+) ($C_{13}H_{12}O_2S$) +
(2-Thienylphenylacetic) acid (+) ($C_{13}H_{12}O_2S$)

Petterson, 1954

mol%	f.t.	E	mol%	f.t.	E
0	72	70.5	62.5	72.5	-
10.5	70.5	63	65.0	73.5	-
20.5	69	"	68.5	74.5	63
30.5	67.5	"	71.0	75.5	-
41.5	65.5	"	79.0	78	-
49.0	68	"	87.0	80.5	-
59.0	71.5	"	100	85	83

α -(2-Thienyl)hydrocinnamic acid (+) ($C_{13}H_{12}O_2S$) +
(2-Thienylphenylacetic) acid (-) ($C_{13}H_{12}O_2S$)

Petterson, 1954

mol%	f.t.	E	mol%	f.t.	E
0	72	70	60.5	64	53
13.0	67.5	53	70.5	70	53
20.5	65	-	80.5	75	-
31.0	61	52	90.5	80	-
40.0	57	52	100	85	83
51.0	57.5	54			

α -(2-Thienyl)hydrocinnamic acid (+) ($C_{13}H_{12}O_2S$) +
(2-Thienyl-2-thienylacetic) acid (-) ($C_{11}H_{10}O_2S_2$)

Petterson, 1955

mol%	f.t.	m.t.	mol%	f.t.	m.t.
0	72	71	60	70	65
10	68	58	70	71	66
20	66	"	80	72.5	67
30	61	"	90	76.5	72
40	66.5	"	100	81	79
50	68.5	64			

α -(2-Thienyl)hydrocinnamic acid (-) ($C_{13}H_{12}O_2S$) +
(2-Thienyl-2-thienylacetic) acid (-) ($C_{11}H_{10}O_2S_2$)

Petterson, 1955

mol%	f.t. I	m.t.	f.t. II
0	72	71	-
10	69.5	66	-
20	67	63.5	-
30	64	62.5	-
40	67.5	-	59
50	70	-	57
60	72	69	-
70	75	71.5	-
80	77	74	-
90	79.5	76	-
100	81	79	-

2-Thenylphenylacetic acid (+) + (-) ($C_{13}H_{12}O_2S$)

Pettersen, 1954

%	f. t.	E	%	f. t.	E
0	85	83	34.5	69.5	67
10.0	80	67.5	40.0	71	67
20.0	75	67	45.0	71.5	67.5
25.0	72.5	"	50.0	72	70.5
30.0	70	"			
			(1+1)		

2-Thenylphenylacetic acid (+) ($C_{13}H_{12}O_2S$) +
2-Thenyl-2-thienyl-acetic acid (-) ($C_{11}H_{10}O_2S_2$)

Pettersen, 1955

mol%	f. t.	m. t.	mol%	f. t.	m. t.
0	81	79	60	71	63
10	76	74	70	73.5	66
20	73.5	70	80	77	68
30	70	67	90	80.5	75
40	67.5	65	100	85	83
50	66	63			
			(1+1)		

2-Thenylphenylacetic acid (-) ($C_{13}H_{12}O_2S$) +
2-Thenyl-2-thienyl-acetic acid (-) ($C_{11}H_{10}O_2S_2$)

Pettersen, 1955

mol%	f. t.	E	mol%	f. t.	E
0	81	79	50	63.5	61
10	77	62	60	68	62
20	71	"	70	74	"
30	68	"	80	77	"
35	64.5	"	90	81	74
40	63	61.5	100	85	83
45	62	61			

Benzyl- α -thenylacetic acid ($C_{14}H_{14}O_2S$) +
Di- α -thenyl-acetic acid ($C_{12}H_{12}O_2S_2$)

Fredga, Aejmelaens and Tollander, 1951

mol%	f. t.	mol%	f. t.
100.0	66.0	58.6	58.4
92.9	65.0	49.2	59.7
86.0	63.1	39.3	60.8
81.9	62.5	29.7	62.1
74.7	60.8	19.9	63.4
68.1	59.4	11.9	64.7
64.9	58.7	0.0	66.8

Thenylthienylacetic acid ($C_{11}H_{10}O_2S_2$) (+) + (-)

Pettersen, 1955

%	f. t.	m. t.	%	f. t.	m. t.
100	81	79	75	89.5	84
95	81	79	70	91.5	86
90	82	79	60	93	90.5
85	84.5	80	50	94	92.5
80	87.5	82			
			(1+1)		

 α -Thenylsuccinic acid ($C_9H_{10}O_4S$) (+) + (-)

Fredga and Palm, 1949

mol%	f. t.	mol%	f. t.
0.0	156.5	18.5	156
5.1	154	27.8	160.5
7.2	150	40.9	163.5
10.2	150.5	50.0	165.5
13.0	153	65.0	162.5

Thiazol-carboxylic acid ($C_6H_5O_2NS$) +
Nicotinic acid ($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	m. t.	%	f. t.	m. t.
100	220	218	37.7	217.0	210.8
94.1	209.8	199.0	22.2	223.0	217.4
81.0	206.0	200.8	6.7	232.4	227.0
65.2	206.6	201.4	0	233	233
51.7	208.8	205.0			

E: 74% 200°

Picolinic acid ($C_6H_5O_2N$) + Nicotinic acid
($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	233	233	45.8	186.8	122.2
92.5	230.2	125	32.7	167.8	121.6
80.0	219.2	120.4	18.4	138.2	120.2
71.6	217.4	121.6	4.5	136.0	122.2
60.7	201.2	119.8	0	137	136
51.4	188.0	123.0			

E: 13% 122°

Picolinic acid ($C_6H_5O_2N$) + Isonicotinic acid
($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
0	137	136	60.8	-	132.4
9.5	200.8	132.0	70.8	-	"
18.4	216.8	131.4	80.5	-	"
29.3	231.2	131.2	90.5	-	"
39.8	-	131.2	100	314	312
46.7	-	132.4			

E: 2% 132°

Picolinic acid ($C_6H_5O_2N$) + Pyrazine-carboxylic
acid ($C_5H_4O_2N_2$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	226	224	39.2	186.6	129.6
89.2	208.8	179.4	32.0	180.8	130.6
79.6	202.6	129.8	19.7	164.2	129.8
71.0	200.2	130.6	7.6	139.6	129.4
59.6	194.8	130.8	0	137	136
49.5	192.4	130.4			

E: 5% 130°

Nicotinic acid ($C_6H_5O_2N$) + Isonicotinic acid
($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
0	233	233	61.7	290.0	215.6
9.0	232.0	215.8	70.5	297	215.0
20.0	224.6	215.6	81.2	297	213.2
31.1	258.4	214.0	90.0	300	215.2
41.7	271.0	217.0	100	314	312
50.5	280.2	215.0			

E: 18% 215°

Swietoslawski, Bylicki and Lisicki, 1952 (fig.)

%	f. t.
0	235
25	205 E
50	260
75	290
100	317

Pyrazine carboxylic acid ($C_5H_4O_2N_2$) +
Nicotinic acid ($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	m. t.	%	f. t.	m. t.
0	226	224	59.6	208.6	202.6
8.9	215.6	212.8	71.5	215.2	202.6
17.1	214.0	208.8	77.1	219.8	202.0
29.7	211.6	207.8	88.3	228.6	213.8
37.7	207.6	205.2	100	233	233
50.0	207.0	201.2			

E: 55% 202°

Pyrazine-carboxylic acid ($C_5H_4O_2N_2$) +
Isonicotinic acid ($C_6H_5O_2N$)

Mislow, 1948

%	f. t.	E	%	f. t.	E
100	226	224	51.0	-	206.8
89.7	214.2	206.8	40.5	-	209.4
79.8	230.8	207.4	27.2	-	207.6
70.0	252.2	208.2	13.2	308	206.8
61.5	-	207.0	0	314	312

E: 88% 207°

Notice for Users

1. Scope of the work

The data compiled refer only to binary systems, concentrated solutions.

As components, I have accepted all kinds of substances, elements or compounds, with the exception of metallic alloys, a category covered by many other books.

As concentrated solutions, I choose to consider arbitrarily systems between 10 and 90 per cent by weight; I left also out of consideration data relating to dilute solutions, if there is only one measure between 10 and 20 %.

All data, so far as possible, have been reproduced from the original publications, if available; in other cases, the actual source of the data is given in the bibliographic reference. Preference has been given to the experimental data, rather than to values interpolated from a formula; in many cases we had to read the data from graphs, with help of a grating (this is denoted by "fig").

2. General Plan

All data are classified by systems, since values of different properties may help to characterise their physical nature.

The systems have been arranged in four categories, one for each volume of this book, as follows:

A. Both components are organic compounds, excepting the hydroxyl derivatives.

B. Both components are organic compounds, one at least being a hydroxyl derivative.

C. One at least of the components is a metallic compound.

D. All other systems.
In that volume are also included the general table of bibliographic references and the general table by substances.

I consider as non-metals the following twenty elements:

B - C, Si - N, P, As - O, S, Se, Te -
H, F, Cl, Br, I - He, Ne, Ar, Kr, Xe

I call non-metallic compounds those with only these elements; and organic compounds all such compounds with at least one atom of C. As metallic compounds, I consider all those with at least one metallic atom. Ex.: CSi is an organic compound, sodium benzoate a metallic one, and HCl a non-metallic one.

3. Order of the systems

In each section, the binary mixtures are brought together in great divisions, according to the degree of physico-chemical similitude of their components; for ex., in the third volume, the first part deals with mixtures of two metallic salts, the second one with solutions of metallic salts in water and the third, with solutions of these salts in all other solvents, non-metallic or organic.

In each of these divisions, the binary mixtures are listed, according to the order of the first component, and, for each of them, according to the order of the second component; for ex., all systems with methane come first, methane + butane being listed before methane + benzene, since butane comes before benzene in my classification.

a) For organic compounds, the general order is: hydrocarbons, halogen derivatives, oxygen derivatives (excluding the hydroxyl ones), nitrogen, mixed oxygen and nitrogen derivatives, and last the hydroxyl derivatives of any kind.

In each of these groups, the aliphatic derivatives come first (saturated and then unsaturated), then the polymethylenes, the aromatic compounds and finally the heterocyclic ones.

The sulfur derivatives are listed after the corresponding oxygen ones, the phosphorus, after the nitrogen ones, the silicon and boron after the carbon ones. In each group, the derivatives produced by halogen substitution are placed at the end of the respective group; for ex., ethylenchlorhydrin comes at the end of the alcohol group.

In accordance with this rule, we have the following arrangement:

Hydrocarbons: paraffins, ethylenic and acetylenic hydrocarbons, polymethylenes and aromatic hydrocarbons.

Halogen derivatives: derivatives of the same hydrocarbon are grouped together, in order of the number of hydrogen atoms substituted by halogen atoms, fluorine derivatives first, then chlorine, bromine and iodine derivatives.

Oxygen derivatives: first the ether oxides, with open chain (ethyl ether) or closed ring (dioxane), the aldehydes and ketones, the anhydrides, and finally the esters.

Nitrogen derivatives: nitriles and amines.

Mixed Oxygen and Nitrogen derivatives: compounds of the amide type, and then nitroso- and nitro- derivatives.

Hydroxyl derivatives: first the alcohols and oximes, then the phenols and finally the acids.

N.B. The presence in the molecule of a chemical function listed later, relegates this compounds to the end of that category, for ex., acetoacetic esters come after the esters.

b) Metallic Compounds. Most of them are electronic compounds which are classified as follows:

The salts, oxides, sulfides, etc. come together, so long as the metal has the same electrovalency, for ex., the ferrous compounds are classified with nickel, cobalt, manganese ones. but the ferric compounds, with aluminum and chromic salts.

The metallic ions are classified in series of the same electrovalency, according to the periodical table:

Li, Na, K, Rb, Cs, Tl⁺ - Cu⁺, Ag, Au⁺, Hg⁺
Be, Mg, Ca, Ba, Sr, Sn⁺⁺, Pb⁺⁺ - Zn⁺⁺, Cd⁺⁺,
Hg⁺⁺, Cu⁺⁺, Mn⁺⁺, Fe⁺⁺, Ni⁺⁺, Co⁺⁺
Al, Ga, In, Tl⁺⁺⁺, Cr⁺⁺⁺, Fe⁺⁺⁺, Rare: Earths
- Sb⁺⁺⁺, Bi⁺⁺⁺.

Ge, Ti, Th, Sn⁺⁺⁺⁺, Pb⁺⁺⁺⁺ - Uranyl.

For each metallic ion, the salts are arranged according to the valency of the anion and the oxygenated salts after all others, as follows:

fluorides, chlorides, bromides, iodides, cyanides, thiocyanates, etc.;
oxides, sulfides, selenides, etc. - nitrides, borides, carbides, silicides;
hydrates, thiohydrates - nitrites, chlorites...
chlorates, bromates, iodates, nitrates;
phosphites, arsenites;
perchlorates - permanganates;
phosphates, arsenates, etc.;
carbonates, sulfites, metasilicates;
sulfates, selenates, chromates, manganates;
orthosilicates.

4. Order of the constants.

So far as possible, especially for systems where the data are particularly numerous, the order in which the properties are classified is as follows:

a) Heterogeneous equilibria:

Critical constants; saturates vapour pressure for the triphase equilibrium.

Vapour pressure curve; boiling curve and azeotropes.

Composition of liquid and vapour coexisting phases.

Densities of coexisting phases and rectilinear diameter.

Composition of the two liquid phases and eventually of the saturated vapour; critical solution point.

Freezing and melting curve; eutectic and transition points.

Equilibria of the condensed phases under high pressure.

b) Properties of phases: first for the gas, then the liquid and finally the mixed crystals:

Densities, coefficients of expansion and of compressibility.

Viscosity and surface tension.

Refractive index and optical dispersion.

Dielectric constant; electrical conductivity.

Optical rotatory power.

Magnetic rotation; magnetic susceptibility.

c) Thermal constants:

Specific heat; heat of solution or mixing.

Heat of vaporization and fusion.

Thermal conductivity.

5. Choice of units.

So far as possible, we have always used units of the c.g.s. system; when necessary, we have converted the original results into these units, so far as it did not involve the use of a coefficient whose value has changed sometimes. Ex: we could, without any ambiguity, transform specific volumes into densities, or density d_t^t into d_4^t ; but to transform molar concentration in weight concentration, if not made by the author himself, would have involved a somehow arbitrary choice of atomic weights.

All our numerical data have been taken as given in the original paper; we always gave priority to direct experimental results, rather than recalculated curves.

Here follow some additional details about the choice of units:

Viscosity: in poises $\cdot 10^5$

Surface tension: in dynes/cm

Temperature: t in centigrade; T = absolute temperature = $t + 273.16$

Pressure: p - in mm Hg; P - in atmospheres; P_{kg} - in kg/cm^2

π and τ represent pressure or temperature coefficient of the constant considered, which means its change by kg or by degree; but when it relates to volume changes, π and τ are coefficients of compressibility or expansion, as given by the formulae:

$$v_t = v_0 \cdot (1 + \tau \cdot t) \text{ and}$$

$$v_p = v_1 \cdot (1 - \pi \cdot P)$$

Specific heat: in calories / gram of mixture

Heat of mixing, heat of vaporization, etc. - in calories / mole of mixture.

In case other units were exceptionally used, this is expressly stated in column headings.

N.B. Scientists of the whole world always agree to give their results in units of the metric system; only in Anglo-Saxon countries, did some authors give also their results in British

units, for the ease of their technicians. But in recent years some American physico-chemists, namely Sage and his co-workers, have published in Industrial and Engineering Chemistry some extensive tables of data on isotherms of mixtures of hydrocarbons, only in British units ($^{\circ}F$, pressure in Lb/sq.in., etc.), without any corresponding tables in metric values, which makes them quite unsuitable for general use in other countries. We have made in most cases the necessary calculations to reproduce these data in metric units, but this work is so laborious and tedious that we were unable to give the complete data; and we wish to protest here with energy against this new mode of publication, which takes no notice of the international scientific public.

6. Nomenclature and bibliographical data.

A. Nomenclature.

Inside this work the common names of the substances are used, with their molecular formulae; but in the Table at the end of the 4th volume, they are classified in the same order as in the Chemical Abstracts, with the different synonyms. For ex., the compound we call ethylene chloride in the book itself, is also named: 1,2-dichlorethane, in the table.

B. Bibliographical data.

Inside the book, the data are reproduced under the name of their author, with the year of publication. The complete bibliographical reference is to be found in the alphabetical list of authors, at the end of this book.

For the transcription of Russian names, we have applied the rules used in Chemical Abstracts. But in case of a Russian author, all of whose quoted publications have been printed in Latin characters, we have reproduced his name as he had it transcribed himself; when necessary, we give also in the list of authors, the alternative transcription of his name.

7. Symbols and abbreviations.

α	Rotatory power, for the length = 10 cm	R	Resistivity
(α)	Specific rotatory power	S	Solid
$(\alpha)^{\text{mol}}$	Molar " "	T	Absolute temperature
$(\alpha)^{\text{magn}}$	Specific magnetic rotatory power	U	Specific heat (cal/gram mixture)
$(\alpha)^{\text{mol}}_{\text{magn}}$	Molar " "	V	Vapour
ϵ	Dielectric constant	aq	Aqua, water
η	Viscosity, in poises $(.10^5)^*$	atm	Atmosphere
κ	Specific conductivity $(.10^4)$	b.t.	Boiling temperature
λ	Equivalent conductivity	c	g/100 cc solution
π	Pressure coefficient $(.10^6)$	cc	Cubic centimeter
σ	Surface tension, in dynes/cm	cal	Calorie (small)
τ	Temperature coefficient	crit.	Critical
χ	Magnetic susceptibility $(.10^6)$ (specific)	d	Density ($t/4$)
C	Crystal	dissoc.	Dissociation
C.S.T.	Critical solution temperature	e	Electromotive force (in volts)
C.V.T.	" vaporization "	f.t.	Freezing temperature
D	Diffusion coefficient $(.10^5)$	g	Gram
D_{therm}	Thermal diffusion coefficient	l	Liter
D b.t.	Boiling temperature difference	m	Molality
D f.t.	Freezing " "	mm	Millimeter
D_p	Pressure difference	mg	Milligram
D_t	Temperature "	min	Minutes
D_v	Volume "	mol	Molar
E	Eutectic	m.t.	Melting temperature
L	Liquid	n	Refractive index
M	Molarity	p	Pressure in mm Hg
N	Normal concentration	sat.t.	Saturation temperature (mutual solubility)
P	Pressure, in atmospheres	sol.	Solution
P_{kg}	" in kg/cm ²	s. or sym.	Symmetrical
Q_{comb}	Heat of combustion (cal/gram mixture)	t	Temperature, centigrade
Q_{dil}	" dilution (cal/mole mixture)	tr.t.	Transition temperature
Q_{diss}	" dissolution "	trans.	Transition
Q_{melt}	" fusion "	vol	Volume
Q_{mix}	" mixing "	v_0	Volume at 0°
Q_{trans}	" transition "	w.l.	Wave length (in Ångström unit)
Q_{vap}	" vaporization "	%	Weight percent
		I, II, etc.	Polymorphic forms
		I - II	Transition of form I into form II

* The given powers for some units are systematically used in the Tables, unless otherwise stated.

SYMBOLS AND ABBREVIATIONS

α	Rotatory power, for the length 10 cm	D b.t.	Boiling temperature difference
(α)	Specific rotatory power	D f.t.	Freezing " "
(α) ^{mol}	Molar " "	Dp	Pressure difference
(α) _{magn}	Specific magnetic rotatory power	Dt	Temperature "
(α) _{magn} ^{mol}	Molar " "	Dv	Volume "
ϵ	Dielectric Constant	E	Eutectic
η	Viscosity, in poises ($\cdot 10^5$)*	L	Liquid
μ	Specific conductivity ($\cdot 10^4$)	M	Molarity
λ	Equivalent conductivity	N	Normal concentration
π	Pressure coefficient ($\cdot 10^6$)	P	Pressure, in atmospheres
σ	Surface tension, in dynes/cm	P _{kg}	" in kg/cm ²
τ	Temperature coefficient	Q comb	Heat of combustion (cal/gram mixture)
χ	Magnetic susceptibility ($\cdot 10^6$) (specific)	Q dil	" dilution (cal/mole mixture)
C	Crystal	Q diss	" dissolution "
C.S.T.	Critical solution temperature	Q melt	" fusion "
C.V.T.	" vaporization "	Q mix	" mixing
D	Diffusion coefficient ($\cdot 10^5$)	Q trans	" transition "
D _{therm}	Thermal diffusion coefficient	Q vap	" vaporization "
		R	Resistivity
		S	Solid

T	Absolute temperature	mol	Molar
U	Specific heat (cal/gram mixture)	m.t.	Melting temperature
V	Vapour	n	Refractive index
aq	Aqua, water	p	Pressure in mm Hg
atm	atmosphere	sat. t.	Saturation temperature (mutual solubility)
b.t.	Boiling temperature	sol	Solution
c	g/100 cc solution	s. or sym.	Symmetrical
cc	Cubic centimeter	t	Temperature, centigrade
cal	Calorie (small)	tr. t.	Transition temperature
crit.	Critical	trans.	Transition
d	Density (t/4)	vol	Volume
dissoc.	Dissociation	v ₀	Volume at 0%
e	Electromotive force (in volts)	w.l.	Wave length (in Ångström unit)
f.t.	Freezing temperature	%	Weight percent
g	Gram	I, II, etc.	Polymorphic forms
l	Liter	I - II	Transition of form I into form II
m	Molality		
mm	Millimeter		
mg	Milligram		
min	Minutes		

* The given powers for some units are systematically used in the Tables, unless otherwise stated.